State of New Jersey

Jon S. Corzine
Governor

DEPARTMENT of ENVIRONMENTAL PROTECTION

Mark N. Mauriello
Acting Commissioner

Environmental Regulation
Bureau of Operating Permits
401 E. State Street, 2nd floor, P.O. Box 27
Trenton, NJ 08625-0027

Air Pollution Control Operating Permit

Permit Activity Number: BOP080001 **Program Interest Number: 56078**

Mailing Address	Plant Location
PAUL THESSEN VICE PRESIDENT WEST DEPTFORD ENERGY LLC 400 CHESTERFIELD CENTER - STE 110 ST LOUIS, MO 63017	WEST DEPTFORD ENERGY LLC Paradise Rd West Deptford Twp Gloucester County

Operating Permit Approval Date: **May 6, 2009**

Operating Permit Expiration Date: **May 5, 2014**

This initial operating permit is approved and issued under the authority of Chapter 106, P.L. 1967 (N.J.S.A. 26:2C-9.2). Equipment at the facility must be operated in accordance with the requirements of this permit.

This operating permit includes a permit shield, pursuant to the provisions of N.J.A.C. 7:27-22.17. However, this permit shield does not alter or affect the liability of the owner or operator of the facility for any violations of any applicable requirement of the Prevention of Significant Deterioration (PSD) rule codified at 40 CFR § 52.21, prior to or at the time of permit issuance. This permit shield also does not relieve the owner or operator of the facility of its obligation to seek a PSD applicability determination from the Department and/or the United States Environmental Protection Agency if required to do so for certain physical changes or changes in the method of its operation. This operating permit does not include compliance schedules as part of the approved compliance plan.

The permittee shall submit to the Department and to the EPA on forms provided by the Department, at the addresses given below, a periodic compliance certification, in accordance with N.J.A.C. 7:27-22.19 and the schedule for compliance certifications set forth in the compliance plan in this operating permit. The annual compliance certification reporting period will cover the calendar year ending December 31. **The annual compliance certification is due to the Department and the EPA within 60 days after the end of each calendar year during which this permit was in effect.** Forms provided by the Department can be found on the Department's website at: http://www.nj.gov/dep/enforcement/compliancecertsair.htm.

The annual compliance certification report may also be considered as your six month deviation report for the period from July 1 through December 31, which is due by January 30 of each year, as required by paragraph 13 in Section F, *General Provisions and Authorities*, of this permit, if the annual compliance certification is submitted by January 30.

New Jersey Department of Environmental Protection
Air & Environmental Quality Compliance & Enforcement
401 East State Street, P. O. Box 422
Trenton, New Jersey 08625-0422

United States Environmental Protection Agency, Region II
Air Compliance Branch
290 Broadway
New York, New York 10007-1866

New Jersey Department of Environmental Protection
Air and Environmental Quality Compliance & Enforcement
Southern Regional Enforcement Office
One Port Center, 2 Riverside Drive
Camden, New Jersey 08103

Approved by:

Yogesh Doshi
Bureau of Operating Permits

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Section A

Facility Name: WEST DEPTFORD ENERGY LLC
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REASON FOR PERMIT

The reason for issuance of this permit is to comply with the air pollution control permit provisions of Title V of the federal Clean Air Act, federal rules promulgated at 40 CFR 70, and state regulations promulgated at N.J.A.C. 7:27-22, which require the state to issue operating permits to major facilities. This is the operating permit for the facility listed on the cover page.

New Jersey has elected to integrate its Title I New Source Review (NSR) preconstruction permits with the new Title V operating permits instead of issuing separate permits. Consequently, the existing preconstruction permit provisions that were previously approved for this facility have been consolidated into this permit. This permit may also include applicable requirements for grandfathered sources.

This permit action consolidates previously approved permit terms and conditions into one single permit for the facility. The New Jersey Department of Environmental Protection (Department) issues this operating permit authorizing the facility to operate equipment and air pollution control devices. In the operating permit application, the facility represented that it meets all applicable requirements of the federal Clean Air Act and the New Jersey Air Pollution Control Act codified at N.J.S.A. 26:2C. Based on an evaluation of the data contained in the facility's application, the Department has approved this operating permit.

This permit allows this facility to operate the equipment and air pollution control devices specified in this permit and emit up to a level specified for each source operation. The signatories named in the application are responsible for ensuring that the facility is operated in a manner consistent with this permit, its conditions, and applicable rules.

Section B

Facility Name: WEST DEPTFORD ENERGY LLC
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DEFINITIONS

The terms used in this permit are used consistent with the definitions at N.J.A.C. 7:27-1 and N.J.A.C. 7:27-22. Any terms defined in this section are not defined at N.J.A.C. 7:27-1 or N.J.A.C. 7:27-22, and are needed for clarifying the permit.

"Permitting Authority" means the New Jersey Department of Environmental Protection (NJDEP).

"The EPA," or "the Administrator," means the Administrator of the EPA or his designee.

"M" preceding a unit of measure means one thousand. For example, "10 M gal." means ten thousand gallons.

"MM" preceding a unit of measure means one million. For example, "10 MM gal." means ten million gallons.

"Grandfathered" means, in reference to equipment or control apparatus, that construction, reconstruction, or modification occurred prior to enactment of N.J.S.A. 26:2C-9.2 on June 15, 1967, or prior to the subsequent applicable revisions to rules and regulations codified at N.J.A.C. 7:27-8 that occurred March 5, 1973, June 1, 1976, April 5, 1985, and October 31, 1994, and no construction, reconstruction, or modification of the equipment or control apparatus has occurred since.

"Compliance Plan" means the applicable requirements, monitoring requirements, recordkeeping requirements, and submittal/action requirements detailed in Section J, Facility Specific Requirements, of the operating permit.

Section C

Facility Name: WEST DEPTFORD ENERGY LLC
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POLLUTANT EMISSIONS SUMMARY

The following table indicates the facility's Potential to Emit (PTE) emissions summary:

Source Categories	Facility Total Potential to Emit (tons per year)									
	Primary						Secondary			
	VOC (total)	NO_x	CO	SO_2	TSP (total)	Other (total)	PM_{10} (total)	$PM_{2.5}$	Pb	HAPs (total)
Emission Unit Summary	94.69	302.74	703.16	35.32	58.39	N/A	99.33	96.12	0.017	9.8
Batch Process Summary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Non-Source Fugitive Emissions[1]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Group Summary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Emissions[2]	94.69	302.74	703.16	35.32	58.39	N/A	99.33	96.12	0.017	9.8

VOC Volatile Organic Compounds
NO_x Nitrogen Oxides
CO Carbon Monoxide
SO_2 Sulfur Dioxide
TSP Total Suspended Particulates
Other Any other air contaminant regulated under the Federal Clean Air Act
PM_{10} Particulates under 10 microns
Pb Lead
HAPs Hazardous Air Pollutants

[1] Not applicable to this facility.
[2] Total emissions from this facility do not include emissions from Insignificant Sources.

Section C

Facility Name: WEST DEPTFORD ENERGY LLC
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POLLUTANT EMISSIONS SUMMARY

The following table indicates the facility's hazardous air pollutants (HAP) emissions summary:[3]

HAP	TPY
1,3-Butadiene	0.024
Acrolein	0.11
Formaldehyde	4.2
Toluene	2.3
Arsenic	0.013
Manganese	0.9
Selenium	0.028

[3] Do not sum these values for the purpose of establishing a total HAP potential to emit. See previous page for the allowable total HAP emissions.

Section D

Facility Name: WEST DEPTFORD ENERGY LLC
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POLLUTION PREVENTION REPORTING

General Pollution Prevention Conditions

The following evaluation requirements are included to track the facility's progress in several critical areas identified in the National Environmental Performance Partnership System (NEPPS). Nitrogen Oxides (NOx) and Volatile Organic Compounds (VOC) are precursors to the air pollutant Ozone, for which New Jersey is non-attainment with the air quality standard for the protection of public health. The control of hazardous air pollutants (HAPs) is also a focus item for the next decade in order to minimize localized hot spots and general urban air toxics levels. Therefore, the Department is requiring evaluation of emission trends at 5-year intervals for major sources of these air contaminants. Also, as part of significant modification applications, proposed major increases of these air contaminants requires evaluation of pollution prevention and cross media effects.

The evaluation of these trends requires no increased monitoring. Rather it utilizes existing monitoring data, as reported annually in Emission Statements (for NOx and VOC) and annual Release and Pollution Prevention Reports (for HAPs). The intent of this evaluation is to better utilize the existing data by having the company, the public and the Department review major source trends periodically, as part of the 5-year renewal review and public comment process. The Department requests that the facility-wide trends be presented on graphs for attachment to the public information document for the 5-year renewal.

Pollution prevention includes changes that result in the reduction in use or generation of non-product output per unit of product. Cross media effects are practices that result in transferring the ultimate release or disposal of a contaminant from one environmental medium (e.g. air) to another environmental medium (e.g. water, solid or hazardous wastes).

Information to include with the renewal application:

1. The facility will evaluate annual emission trends over the last five years for actual air contaminant emissions of Volatile Organic Compounds (VOC), Nitrogen Oxides (NOx), if the facility's potential to emit VOC or NOx is greater than 25 tons per year, or any Hazardous Air Pollutants (HAP), for which the facility's potential to emit is greater than 10 tons per year. The VOC and NOx emission data should reflect annual emission statement reports submitted pursuant to N.J.A.C. 7:27-21, and the HAP emissions data should reflect the annual Release and Pollution Prevention Report submitted pursuant to N.J.A.C. 7:1G-4 and 5 and N.J.A.C. 7:1K-6. Although not required, the Department encourages the facility to explain the reason for any significant trend, including whether it is the result of cross media shifts (to air, water, or solid waste) and/or pollution prevention. Changes should be itemized for each emission unit (or process) with a potential to emit over five tons per year of VOC or NOx or a potential to emit over one ton per year of any HAP. Also, show the net change for the facility.

2. The facility will summarize annual potential to emit limits (allowable emissions) for VOC, NOx, and HAPs, which are subject to reporting under 1 above, for the last five years. Changes should be itemized for each emission unit (or process) with a potential to emit over five tons per year of VOC or NOx or a potential to emit over one ton per year of any HAP. Also, show the net change for the facility.

3. The facility will summarize five-year trends in annual VOC, NOx, and HAP emissions, which are subject to reporting under 1 above, on a pound per unit of product basis, based on annual actual emissions and annual

production over the five year period. Changes should be itemized for each emission unit (or process) with a potential to emit over five tons per year of VOC or NOx or a potential to emit over one ton per year of any HAP. Also, show the net change for the facility.

4. The facility will discuss five-year trends in actual air contaminant emissions of non-source VOC and HAP fugitives, which are subject to reporting under 1 above; explain measures taken to minimize such fugitives; and provide an explanation for any significant changes.

Information to include with an application for a Significant Modification to this permit:

1. For any significant modifications, the facility is encouraged to explain any cross media shifts of VOC and HAP air contaminants as part of the significant modification application. If an explanation is provided, the facility should identify the pollutant and the specific environmental media to which the pollutant is anticipated to be transferred, whether it be from air to solid waste or water, or from water or solid waste to the air.

Section E

Facility Name: WEST DEPTFORD ENERGY LLC
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GENERAL PROVISIONS AND AUTHORITIES

Operating Permits

1. No permittee shall allow any air contaminant, including an air contaminant detectable by the sense of smell, to be present in the outdoor atmosphere in a quantity and duration which is, or tends to be, injurious to human health or welfare, animal or plant life or property, or which would unreasonably interfere with the enjoyment of life or property. This shall not include an air contaminant which occurs only in areas over which the permittee has exclusive use or occupancy. Conditions relative only to nuisance situations, including odors, are not considered Federally enforceable. [N.J.A.C. 7:27-22.16(g)8]

2. Any deviation from operating permit requirements which results in a release of air contaminants shall be reported to the Department as follows:

   If the air contaminants are released in a quantity or concentration which poses a potential threat to public health, welfare or the environment or which might reasonably result in citizen complaints, the permittee shall report the release to the Department:

   i. Immediately on the Department hotline at 1-877-927-6337, pursuant to N.J.S.A. 26:2C-19(e); and

   ii. As part of the compliance certification required in N.J.A.C. 7:27-22.19(f). However, if the deviation is identified through source emissions testing, it shall be reported through the source emissions testing and monitoring procedures at N.J.A.C. 7:27-22.18(e)3; or

   If the air contaminants are released in a quantity or concentration which poses no potential threat to public health, welfare or the environment and which will not likely result in citizen complaints, the permittee shall report the release to the Department as part of the compliance certification required in N.J.A.C. 7:27-22.19(f), except for deviations identified by source emissions testing reports, which shall be reported through the procedures at N.J.A.C. 7:27-22.18(e)3; or

   If the air contaminants are released in a quantity or concentration which poses no potential threat to public health, welfare or the environment and which will not likely result in citizen complaints, and the permittee intends to assert the affirmative defense afforded by N.J.A.C. 7:27-22.16(l), the violation shall be reported by 5:00 P.M. of the second full calendar day following the occurrence, or of becoming aware of the occurrence, consistent with N.J.A.C. 7:27-22.16(l). [N.J.A.C. 7:27-22.19(g)]

3. The permittee shall comply with all conditions of the operating permit including the approved compliance plan. Any non-compliance with a permit condition constitutes a violation of the New Jersey Air Pollution Control Act N.J.S.A. 26:2C-1 et seq., or the CAA, 42 U.S.C. §7401 et seq., or both, and is grounds for enforcement action; for termination, revocation and reissuance, or for modification of the operating permit; or for denial of an application for a renewal of the operating permit. [N.J.A.C. 7:27-22.16(g)1]

4. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of its operating permit. [N.J.A.C. 7:27-22.16(g)2]

5. This operating permit may be modified, terminated, or revoked for cause by the EPA pursuant to 40 CFR 70.7(g) and revoked or reopened and modified for cause by the Department pursuant to N.J.A.C. 7:27-22.25. [N.J.A.C. 7:27-22.16(g)3]

6. The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this operating permit; or to determine compliance with the operating permit. [N.J.A.C. 7:27-22.16(g)4]

7. The filing of an application for a modification of an operating permit, or of a notice of planned changes or anticipated non-compliance, does not stay any operating permit condition. [N.J.A.C. 7:27-22.16(g)5]

8. The operating permit does not convey any property rights of any sort, or any exclusive privilege. [N.J.A.C. 7:27-22.16(g)6]

9. Upon request, the permittee shall furnish to the Department copies of records required by the operating permit to be kept. [N.J.A.C. 7:27-22.16(g)7]

10. The Department and its authorized representatives shall have the right to enter and inspect any facility subject to N.J.A.C. 7:27-22, or portion thereof, pursuant to N.J.A.C. 7:27-1.31. [N.J.A.C. 7:27-22.16(g)9]

11. The permittee shall pay fees to the Department pursuant to N.J.A.C. 7:27. [N.J.A.C. 7:27-22.16(g)10]

12. Each permittee shall maintain records of all source emissions testing or monitoring performed at the facility and required by the operating permit in accordance with N.J.A.C. 7:27-22.19. Records shall be maintained, for at least five years from the date of each sample, measurement, or report. Each permittee shall maintain all other records required by this operating permit for a period of five years from the date that each record is made. At a minimum, source emission testing or monitoring records shall contain the information specified at N.J.A.C. 7:27-22.19(b). [N.J.A.C. 7:27-22.19(a) and N.J.A.C. 7:27-22.19(b)]

13. In accordance with N.J.A.C. 7:27-22.19(c) and 22.19(d) 3, each permittee shall submit to the Department, on forms provided by the Department, a six month deviation report relating to testing and monitoring required by the operating permit, not including information for testing and monitoring which have other reporting schedules specified in the permit. Normally, stack testing reporting is submitted within 45 days of test completion and continuous monitoring reporting is done quarterly. The six month report must address other specified monitoring, including, but not limited to, continuous and periodic monitoring data required by this permit. (See column two and three entitled "Monitoring Requirement" and "Recordkeeping Requirement," respectively, in the Facility Specific Requirement Section of this permit.). The six month reports for the testing and monitoring performed from January 1 through June 30, shall be reported by July 30 of the same calendar year; or from July 1 through December 31, shall be reported by January 30 of the following calendar year. Pursuant to N.J.A.C. 7:27-22.19(e), these six month reports shall clearly identify all deviations from operating permit requirements, the probable cause of such deviations, and any corrective actions taken. Any "None" listed in the Submittal/Action Requirement in the Operating Permit is not intended to override the six-month deviation report. The report shall be certified pursuant to N.J.A.C. 7:27-1.39 by a responsible official. Forms provided by the Department can be found on the Department's website at: http://www.nj.gov/dep/enforcement/compliancecertsair.htm. [N.J.A.C. 7:27-22.19(d)3 and N.J.A.C. 7:27-22.19(e)]

    An annual compliance certification required by paragraph 2 above and required by N.J.A.C. 7:27-22.19(f) may also be considered as your six month deviation report for the period from July 1 through December 31, which is due by January 30 of each year, if the annual compliance certification is submitted by January 30.

14. For emergencies (as defined at 40 CFR 70.6(g)(1)) that result in non-compliance with any promulgated federal technology-based standard such as NSPS, NESHAPS, or MACT, a federal affirmative defense is available, pursuant to 40 CFR 70. To assert a federal affirmative defense, the permittee must use the procedures set forth in 40 CFR 70. The affirmative defense provisions described in 15 below may not be

applied to any situation that caused the Facility to exceed any federally delegated regulation, including but not limited to NSPS, NESHAP, or MACT.

15. For situations other than those covered by 14 above, an affirmative defense is available for a violation of a provision or condition of the operating permit only if:

    i. The violation occurred as a result of an equipment malfunction, an equipment start-up or shutdown, or during the performance of necessary equipment maintenance; and

    ii. The affirmative defense is asserted and established as required by N.J.S.A. 26:2C-19.1 through 19.5 and any implementing rules. [N.J.A.C. 7:27-22.16(l)]

16. Each permittee shall meet all requirements of the approved source emissions testing and monitoring protocol during the term of the operating permit. [N.J.A.C. 7:27-22.18(j)]

The following paragraphs of this section are included for the permittee's convenience to remind them of their obligations with certain key applicable requirements. These paragraphs are not enforceable since they paraphrase areas of the operating permits rule. Also, these paragraphs do not reference all the applicable requirements with which the permittee must comply.

17. Each owner and each operator of any facility, source operation, or activity to which this permit applies is responsible for ensuring compliance with all requirements of N.J.A.C. 7:27-22. If the owner and operator are separate persons, or if there is more than one owner or operator, each owner and each operator is jointly and severally liable for any fees due under N.J.A.C. 7:27-22, and for any penalties for violation of N.J.A.C. 7:27-22.

18. In the event of a challenge to any part of this operating permit, all other parts of the permit shall continue to be valid.

19. The permittee shall ensure that no air contaminant is emitted from any significant source operation at a rate, calculated as the potential to emit, that exceeds the applicable threshold for reporting emissions set forth in the Appendix to N.J.A.C. 7:27-22, unless emission of the air contaminant is authorized by this operating permit.

20. Consistent with the provisions of N.J.A.C. 7:27-22.3(e), the permittee shall ensure that all requirements of this Operating Permit are met. In the event that there are multiple emission limitations, monitoring, recordkeeping, and/or reporting requirements for a given source operation, the facility must comply with all requirements, including the most stringent.

21. Consistent with the provisions of N.J.A.C. 7:27-22.9(c), the permittee shall use monitoring of operating parameters, where required by the compliance plan, as a surrogate for direct emissions testing or monitoring, to demonstrate compliance with applicable requirements.

22. The permittee shall file a timely and complete application for:

    Administrative Amendments;
    Seven-Day-Notice changes;
    Minor Modifications;
    Significant Modifications; and
    Renewals.

23. Process monitors must be operated at all times when the associated process equipment is operating except during outage time allowed by Department guidelines/procedures or as outlined in Technical Manual 1005. The permittee must keep a service log as required.

Section F

Facility Name: WEST DEPTFORD ENERGY LLC
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STATE-ONLY APPLICABLE REQUIREMENTS

N.J.A.C. 7:27-22.16(b)5 requires the Department to specifically designate as not being federally enforceable any permit conditions based only on applicable state requirements. The applicable state requirements to which this provision applies are listed in the table titled "State-Only Applicable Requirements."

STATE-ONLY APPLICABLE REQUIREMENTS

The following applicable requirements are not federally enforceable:

SECTION	SUBJECT ITEM	ITEM #	REF. #
E	---	15	---
G	FC	---	3
G	FC	---	10

Section G

Facility Name: WEST DEPTFORD ENERGY LLC
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COMPLIANCE PLAN AND INVENTORIES

- FACILITY SPECIFIC REQUIREMENTS – PAGE INDEX
- FACILITY SPECIFIC REQUIREMENTS (COMPLIANCE PLAN)
- FACILITY PROFILE (ADMINISTRATIVE INFORMATION)
- REASON FOR APPLICATION
- NON-SOURCE FUGITIVE EMISSIONS
- INSIGNIFICANT SOURCE EMISSIONS
- EQUIPMENT INVENTORY
- CONTROL DEVICE INVENTORY
- EMISSION POINT INVENTORY
- EMISSION UNIT/BATCH PROCESS INVENTORY
- SUBJECT ITEM GROUP INVENTORY
- EQUIPMENT DETAILS
- CONTROL DEVICE DETAILS

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FACILITY SPECIFIC REQUIREMENTS – PAGE INDEX

Subject Item and Name **Page Number**

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **FC**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	General Provisions: Defines numerous terms used in N.J.A.C. 7:27. Specifies procedures for making confidentiality claims, certifying applications, reports, and other documents to the Department, and requesting adjudicatory hearings and stays of the effective date of departmental decisions. Also, provides provisions regarding applicability, severability, and liberal construction of N.J.A.C. 7:27. [N.J.A.C. 7:27- 1]	None.	None.	None.
2	Control and Prohibition of Open Burning: Prohibits any person from open burning of rubbish, garbage, trade waste, buildings, structures, leaves, other plant life and salvage. Open burning of infested plant life or dangerous material may only be performed with a permit from the Department. [N.J.A.C. 7:27- 2]	None.	None.	Obtain an approved permit: Prior to occurrence of event (prior to open burning). [N.J.A.C. 7:27- 2]
3	Prohibition of Air Pollution: Notwithstanding compliance with other subchapters of N.J.A.C. 7:27, no person shall suffer, allow, or permit to be emitted into the outdoor atmosphere substances in quantities that result in air pollution as defined at N.J.A.C. 7:27-5.1. Applicable to all facilities located in New Jersey. [N.J.A.C. 7:27- 5]	None.	None.	None.
4	Prevention and Control of Air Pollution Control Emergencies: Requires that written Standby Plans, consistent with good industrial practice and safe operating procedures, be prepared for reducing the emission of air contaminants during periods of an air pollution alert, warning, or emergency. Any person responsible for the operation of a source of air contamination not set forth in Table 1 of N.J.A.C. 7:27-12 is not required to prepare such a plan unless requested by the Department in writing. [N.J.A.C. 7:27-12]	None.	None.	Comply with the requirement: Upon occurrence of event. Upon proclamation by the Governor of an air pollution alert, warning, or emergency, the permittee shall put the Standby Plan into effect. In addition, the permittee shall ensure that all of the applicable emission reduction objectives of N.J.A.C. 7:27-12.4, Table I, II, and III are complied with whenever there is an air pollution alert, warning, or emergency. [N.J.A.C. 7:27-12]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	Emission Offsets Rules. [N.J.A.C. 7:27-18]	Other: When applying for minor/significant modification, demonstrate compliance with this applicable requirement which may call for specific monitoring and/or recordkeeping activities. [N.J.A.C. 7:27-18].	Other: When applying for minor/significant modification, demonstrate compliance with this applicable requirement which may call for specific monitoring and/or recordkeeping activities. [N.J.A.C. 7:27-18].	Comply with the requirement: Upon occurrence of event. Submit an administratively complete application when applying for a minor modification pursuant to N.J.A.C. 7:27-22.23 or a significant modification pursuant to N.J.A.C. 7:27-22.24. [N.J.A.C. 7:27-22]
6	Emissions Statements: Submit an annual emission statement (if required) electronically to the NJDEP by May 15 of each year (or by mutually agreed upon date, but no later than June 15 of each year). [N.J.A.C. 7:27-21]	Other: The emission statement will be based on monitoring, recording and recordkeeping of actual emissions, capture and control efficiencies, process rate and operating data for source operations with the potential to emit certain air contaminants. [N.J.A.C. 7:27-21].	Other: The emission statement and all supporting records shall be maintained on the operating premises for a period of five (5) years from the due date of each emission statement. [N.J.A.C. 7:27-21].	Submit an Annual Emission Statement: Annually (if required) electronically by May 15 or by any mutually agreed upon date, but not later than June 15 of each year. [N.J.A.C. 7:27-21]
7	Compliance Certification: Submit annual compliance certification for each applicable requirement, pursuant to N.J.A.C. 7:27-22.19(f), within 60 days after the end of each calendar year during which this permit was in effect. [N.J.A.C. 7:27-22]	None.	None.	Submit an Annual Compliance Certification: Annually to the Department and EPA on forms provided by the Department within 60 days after the end of each calendar year during which this permit was in effect. The annual compliance certification reporting period will cover the calendar year ending December 31. Forms provided by the Department can be found on the Department's web site at the following link: http://www.nj.gov/dep/enforcement/compliancecertsair.htm [N.J.A.C. 7:27-22]
8	Prevention of Air Pollution from Architectural Coatings and Consumer Products. [N.J.A.C. 7:27-23]	None.	None.	None.
9	For equipment subject to NOx Budget Program, comply with N.J.A.C. 7:27-31. [N.J.A.C. 7:27-31]	Other: See N.J.A.C. 7:27-31. [N.J.A.C. 7:27-31].	Other: See N.J.A.C. 7:27-31. [N.J.A.C. 7:27-31].	Comply with the requirement: Upon occurrence of event. [N.J.A.C. 7:27-31]
10	Any operation of equipment which causes off-property effects, including odors, or which might reasonably result in citizen's complaints shall be reported to the Department to the extent required by the Air Pollution Control Act, N.J.S.A. 26:2C-19(e). [N.J.S.A. 26:2C-19(e)]	Other: Observation of plant operations. [N.J.S.A. 26:2C-19(e)].	Other: Maintain a copy of all information submitted to the Department. [N.J.S.A. 26:2C-19(e)].	Notify by phone: Upon occurrence of event. A person who causes a release of air contaminants in a quantity or concentration which poses a potential threat to public health, welfare or the environment or which might reasonably result in citizen complaints shall immediately notify the Department. Such notification shall be made by calling the Environmental Action Hotline at (877) 927-6337. [N.J.S.A. 26:2C-19(e)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	Prevention of Significant Deterioration (PSD). [40 CFR 52.21]	Other: When applying for minor/significant modification, demonstrate compliance with this applicable requirement which may call for specific monitoring and/or recordkeeping activities. [40 CFR 52.21].	Other: When applying for minor/significant modification, demonstrate compliance with this applicable requirement which may call for specific monitoring and/or recordkeeping activities. [40 CFR 52.21].	Comply with the requirement: Upon occurrence of event. If subject to PSD, the permittee shall submit an administratively complete application when applying for a significant modification pursuant to N.J.A.C. 7:27-22.24. [N.J.A.C. 7:27-22]
12	National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Asbestos. [40 CFR 61]	Other: Comply with 40 CFR 61.145 and 61.150 when conducting any renovation or demolition activities at the facility. [40 CFR 61].	Other: Comply with 40 CFR 61.145 and 61.150 when conducting any renovation or demolition activities at the facility. [40 CFR 61].	Comply with the requirement: Upon occurrence of event. The permittee shall comply with 40 CFR 61.145 and 61.150 when conducting any renovation or demolition activities at the facility. [40 CFR 61]
13	Protection of Stratospheric Ozone:1) If the permittee manufactures, transforms, destroys, imports, or exports a Class I or Class II substance, the permittee is subject to all the requirements as specified at 40 CFR 82, Subpart A; 2) If the permittee performs a service on motor "fleet" vehicles when this service involves an ozone depleting substance refrigerant (or regulated substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified at 40 CFR 82, Subpart B. 3) The permittee shall comply with the standards for labeling of products containing or manufactured with ozone depleting substances pursuant to 40 CFR 82, Subpart E. 4). The permittee shall comply with the standards for recycling and emission reductions of Class I and Class II refrigerants or a regulated substitute substance during the service, maintenance, repair, and disposal of appliances pursuant to 40 CFR 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B. 5) The permittee shall be allowed to switch from any ozone depleting substance to any alternative that is listed in the Significant New Alternative Program (SNAP) promulgated pursuant to 40 CFR 82, Subpart G. [40 CFR 82]	Other: Comply with 40 CFR 82 Subparts A, B, E, F, and G. [40 CFR 82].	Other: Comply with 40 CFR 82 Subparts A, B, E, F, and G. [40 CFR 82].	Comply with the requirement: Upon occurrence of event. The permittee shall comply with 40 CFR 82 Subparts A, B, E, F, and G. [40 CFR 82]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	Deviation Report: In accordance with N.J.A.C. 7:27-22.19(c) and 22.19(d)3, the permittee shall submit to the Department, on forms provided by the Department, a certified six-month deviation report relating to testing and monitoring required by the operating permit, not including information for stack emissions testing or continuous emissions monitoring which have other reporting schedules specified in the permit (normally, stack test report is submitted within 45 days of test completion and continuous monitor reporting is done quarterly). Pursuant to N.J.A.C. 7:27-22.19(e), the six-month report must address other specified monitoring, including continuous and periodic monitoring requirements found in column 2 and 3, entitled "Monitoring Requirement" and "Recordkeeping Requirement," respectively, of the Facility Specific Requirements section of this permit. These six-month reports shall clearly identify all deviations from operating permit requirements, the probable cause of such deviations, and any corrective actions or preventive measures taken. If no deviations occurred, the report should say so. Any "None" listed in the Submittal/Action Requirement in the Operating Permit is not intended to override the six-month deviation report. [N.J.A.C. 7.27-22.19(d)3, N.J.A.C. 7.27-22.19(e), and [N.J.A.C. 7:27-22.19(c)]	None.	Other: The permittee shall maintain deviation reports for a period of five years from the date each report is submitted to the Department. [N.J.A.C. 7:27-22.19(a)].	Submit a report: As per the approved schedule. The six-month reports for other specified testing or monitoring required by the operating permit performed from January 1 through June 30 shall be submitted by July 30 of the same calendar year, and from July 1 through December 31, shall be submitted by January 30 of the following calendar year. The report shall be submitted to the Regional Enforcement Office and shall be certified pursuant to N.J.A.C. 7:27-1.39 by the responsible official. Forms provided by the Department can be found on the Department's web site at the following link: http://www.nj.gov/dep/enforcement/compliancecertsair.htm [N.J.A.C. 7:27-22]
15	No person shall combust used oil except as authorized pursuant to N.J.A.C. 7:27-20. [N.J.A.C. 7:27-20.2]	None.	None.	Comply with the requirement: Prior to occurrence of event (prior to burning used oil) either register with the Department pursuant to N.J.A.C. 7:27-20.3 or obtain a permit issued by the Department pursuant to N.J.A.C. 7:27-8 or 7:27-22, whichever is applicable. [N.J.A.C. 7:27-20.2(d)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	Prevention of Accidental Releases: Facilities producing, processing, handling or storing a chemical, listed in the tables of 40 CFR Part 68.130, and present in a process in a quantity greater than the listed Threshold Quantity, shall comply with 40 CFR 68. [40 CFR 68]	Other: Comply with 40 CFR 68. [40 CFR 68].	Other: Comply with 40 CFR 68. [40 CFR 68].	Other (provide description): Other. Comply with 40 CFR 68 as described in the Applicable Requirement. [40 CFR 68]
17	For equipment subject to Clean Air Interstate Rule (CAIR) NOx Trading Program, comply with N.J.A.C. 7:27-30. [N.J.A.C. 7:27-30]	Other: See N.J.A.C. 7:27-30. [N.J.A.C. 7:27-30].	Other: See N.J.A.C. 7:27-30. [N.J.A.C. 7:27-30].	Comply with the requirement: Upon occurrence of event. [N.J.A.C. 7:27-30]
18	For equipment subject to CO2 Budget Trading Program, comply with N.J.A.C. 7:27C. [N.J.A.C. 7:27C]	Other: See N.J.A.C. 7:27C. [N.J.A.C. 7:27C].	Other: See N.J.A.C. 7:27C. [N.J.A.C. 7:27C].	Comply with the requirement: Upon occurrence of event. [N.J.A.C. 7:27C]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS2 Fuel Oil Storage Tanks < 10,000 gallons**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Sulfur Content in Fuel <= 0.2 % by weight. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **GR1 Total Annual Facility Wide Emissions from the Facility**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 302.74 tons/yr based on a consecutive 365 day period, rolling one day basis. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations annually, based on a rolling 30 day average (rolling 1 day basis). Annual emissions of total NOx from the facility shall include NOx emitted by the two turbines and duct burners, one emergency diesel generator, one auxiliary boiler, and one fire water pump. The annual emissions shall be calculated as follows: NOx (total) tons/year = Cumulative annual NOx emissions (tpy) derived from each combustion turbine CEMS system + (10.6 lbs/hr x annual operating hours for Emergency Diesel Generator / 2000 lbs/ton) + (1.4 lbs/hr x annual operating hours for auxiliary boiler / 2000 lb/ton) + (1.98 lbs/hr x annual operating hours for diesel Fire Water Pump / 2000 lbs/ton). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
2	CO <= 703.16 tons/yr based on a consecutive 365 day period, rolling one day basis. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations annually, based on a rolling 30 day average (rolling 1 day basis). Annual emissions of total CO from the facility shall include CO emitted by the two turbines and duct burners, one emergency diesel generator, one auxiliary boiler, and one fire water pump. The annual emissions shall be calculated as follows: CO (total) tons/year = Cumulative annual CO emissions (tpy) derived from each combustion turbine CEMS system + (5.8 lbs/hr x annual operating hours for Emergency Diesel Generator / 2000 lbs/ton) + (2.0 lbs/hr x annual operating hours for auxiliary boiler / 2000 lb/ton) + (1.7 lbs/hr x annual operating hours for diesel Fire Water Pump / 2000 lbs/ton). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	VOC (Total) <= 94.69 tons/yr based on a consecutive 365 day period, rolling one day basis. . [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations annually, based on a rolling 30 day average (rolling 1 day basis). Annual emissions of total VOC from the facility shall include VOC emitted by the two turbines and duct burners, one emergency diesel generator, one auxiliary boiler, and one fire water pump. The annual emissions shall be calculated as follows: VOC (Total) tons/year = (allowable lbs/hr emission rate x sum of annual operating hours for two combustion turbines firing natural gas with duct burner on / 2000 lbs/ton) + (6.45 lbs/hr x sum of annual operating hours for two combustion turbines firing natural gas with duct burner off / 2000 lbs/ton) + (13.77 lbs/hr x sum of annual operating hours for two combustion turbines firing oil / 2000 lbs/ton) + (0.64 lbs/hr x annual operating hours for Emergency Diesel Generator / 2000 lbs/ton) + (0.20 lbs/hr x annual operating hours for auxiliary boiler / 2000 lb/ton) + (0.7 lbs/hr x annual operating hours for diesel Fire Water Pump / 2000 lbs/ton). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
4	SO2 <= 35.32 tons/yr based on a consecutive 365 day period, rolling one day basis. . [N.J.A.C. 7:27-22.16(o)]	SO2: Monitored by calculations annually, based on a rolling 30 day average (rolling 1 day basis). Annual emissions of total SO2 from the facility shall include SO2 emitted by the two turbines and duct burners. The annual emissions shall be calculated as follows: SO2 (Total) tons/year = [(0.0021 (lb/MMBtu))*(hourly heat input from natural gas (MMBTU/hr))*(hours per year operating on natural gas)]/[(2000) lb/ton + [(0.0021 (lb/MMBtu))*(hourly heat input from ULSD(MMBTU/hr))*(hours per year operating on ULSD)]/[(2000) lb/ton. [N.J.A.C. 7:27-22.16(a)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	TSP <= 58.39 tons/yr based on a consecutive 365 day period, rolling one day basis. . [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations annually, based on a rolling 30 day average (rolling 1 day basis). Annual emissions of total TSP from the facility shall include TSP emitted by the two turbines and duct burners, one emergency diesel generator, one auxiliary boiler, one fire water pump, and two cooling towers. The annual emissions shall be calculated as follows: TSP (Total) tons/year = (allowable lbs/hr x sum of annual operating hours for two combustion turbines firing natural gas with duct burner on / 2000 lbs/ton) + (6 lbs/hr x sum of annual operating hours for two combustion turbines firing natural gas with duct burner off / 2000 lbs/ton) + (17 lbs/hr x sum of annual operating hours for two combustion turbines firing oil / 2000 lbs/ton) + (0.33 lbs/hr x annual operating hours for Emergency Diesel Generator / 2000 lbs/ton) + (0.20 lbs/hr x annual operating hours for auxiliary boiler / 2000 lb/ton) + (0.10 lbs/hr x annual operating hours for diesel Fire Water Pump / 2000 lbs/ton) + (0.89 lbs/hr x sum of annual operating hours for the two cooling towers / 2000 lbs/ton). [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	PM-2.5 (Total) <= 96.12 tons/yr based on a consecutive 365 day period, rolling one day basis. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations annually, based on a rolling 30 day average (rolling 1 day basis). Annual emissions of total PM2.5 from the facility shall include PM2.5 emitted by the two turbines and duct burners, one emergency diesel generator, one auxiliary boiler, one fire water pump, and two cooling towers. The annual emissions shall be calculated as follows: PM2.5 (Total) tons/year = (allowable lbs/hr emission rate x sum of annual operating hours for two combustion turbines firing natural gas with duct burner on / 2000 lbs/ton) + (12.00 lbs/hr x sum of annual operating hours for two combustion turbines firing natural gas with duct burner off / 2000 lbs/ton) + (34 lbs/hr x sum of annual operating hours for two combustion turbines firing oil / 2000 lbs/ton) + (0.33 lbs/hr x annual operating hours for Emergency Diesel Generator / 2000 lbs/ton) + (0.20 lbs/hr x annual operating hours for auxiliary boiler / 2000 lb/ton) + (0.10 lbs/hr x annual operating hours for diesel Fire Water Pump / 2000 lbs/ton) + (0.22 lbs/hr x sum of annual operating hours for the two cooling towers / 2000 lbs/ton). . [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	PM-10 (Total) <= 99.33 tons/yr based on a consecutive 365 day period, rolling one day basis. . [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations annually, based on a rolling 30 day average (rolling 1 day basis). Annual emissions of total PM10 from the facility shall include PM10 emitted by the two turbines and duct burners, one emergency diesel generator, one auxiliary boiler, one fire water pump, and two cooling towers. The annual emissions shall be calculated as follows: PM10 (Total) tons/year = (allowable lbs/hr emission rate x sum of annual operating hours for two combustion turbines firing natural gas with duct burner on / 2000 lbs/ton) + (12.0 lbs/hr x sum of annual operating hours for two combustion turbines firing natural gas with duct burner off / 2000 lbs/ton) + (34 lbs/hr x sum of annual operating hours for two combustion turbines firing oil / 2000 lbs/ton) + (0.33 lbs/hr x annual operating hours for Emergency Diesel Generator / 2000 lbs/ton) + (0.20 lbs/hr x annual operating hours for auxiliary boiler / 2000 lb/ton) + (0.10 lbs/hr x annual operating hours for diesel Fire Water Pump / 2000 lbs/ton) + (0.59 lbs/hr x sum of annual operating hours for the two cooling towers / 2000 lbs/ton). [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U1 Combined Cycle Turbines - 600 MW, natural gas / ULSD fired**

Operating Scenario: **OS Summary**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Conduct a comprehensive stack test at emission point PT101 and PT102 within 180 days from the date of initial operation of the turbines to demonstrate compliance with the NOx, CO, VOC, SO2, TSP, PM2.5, PM10, Ammonia and opacity emission limits while burning natural gas and ultra low sulfur distillate oil (ULSD). Compliance shall also be determined by continuous emission monitoring for NOx, CO and O2. The stack emission testing shall be conducted at worst-case operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. The permittee shall provide BTS with the turbine load performance curve with the protocol. The initial performance test for compliance with NOx emission limits, as per NSPS KKKK, must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Alternatively, the testing might be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved. [40CFR60.4400] [N.J.A.C. 7:27-22.16(a)]	Monitored by stack emission testing once initially. Compliance shall also be determined by continuous emission monitoring for NOx, CO and O2. Unless otherwise approved in the stack test protocol or by the Department, each test run shall be 60 minutes in sampling duration. Compliance period shall be as specified in the monitoring requirement for each applicable emission limit. Stack tests shall be conducted for NOx, CO, VOC, SO2, TSP, PM2.5, PM10, ammonia and opacity emissions, while combusting natural gas and ultra low sulfur distillate oil. . [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously and stack test results once initially. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 within 60 days from the date of the initial operation of the turbines. Within 30 days of protocol approval, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. The stack test must be conducted within 180 days from the date of the initial operation of the turbines. N.J.A.C.7:27-22.19(d). The stack test report must be submitted to BTS within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. A copy of the test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit. The test results shall be reported in lb/hr, lb/MMBTU (HHV) and ppmvd @ 15% O2. For CEMS: Submit equipment protocol, submit a Performance Specification Tests (PST) protocol, conduct PST and submit results as per the approved schedule. [N.J.A.C. 7:27-22.18(e)], [N.J.A.C. 7:27-22.18(h)] and. [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	Conduct a comprehensive stack test at emission point PT101 and PT102 at least 18 months prior to the expiration of the approved operating permit to demonstrate compliance with the NOx, CO, VOC, PM2.5, PM10 and Ammonia emission limits while combusting natural gas and with the NOx, CO, VOC, TSP, PM2.5, PM10 and Ammonia emission limits while combusting ultra low sulfur distillate oil. Compliance shall also be determined by continuous emission monitoring for NOx, CO and O2. The stack emission testing shall be conducted at worst-case operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]	Monitored by stack emission testing prior to permit renewal. Compliance shall also be determined by continuous emission monitoring for NOx, CO and O2. Unless otherwise approved in the stack test protocol or by the Department, each test run shall be 60 minutes in sampling duration. Compliance period shall be as specified in the monitoring requirement for each applicable emission limit. Stack tests shall be conducted for NOx, CO, VOC, PM2.5, PM10 and Ammonia emission limits while combusting natural gas and for NOx, CO, VOC, TSP, PM2.5, PM10 and Ammonia emission limits while combusting ultra low sulfur distillate oil. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously and by stack emission test results prior to permit renewal. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 at least 30 months prior to the expiration of the approved operating permit. Within 30 days of protocol approval, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. A full stack test report must be submitted to BTS and a certified summary test report, as described in the protocol, must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. A copy of the certified summary test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit. The test results shall be reported in lb/hr, lb/MMBTU (HHV) and ppmvd @ 15% O2. For CEMS: Submit equipment protocol, submit a Performance Specification Tests (PST) protocol, conduct PST and submit results as per the approved schedule. [N.J.A.C. 7:27-22.18(e)], [N.J.A.C. 7:27-22.18(h)] and. [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	Conduct a comprehensive stack test at emission point PT101 and PT102 every 3 months to demonstrate compliance with the PM-2.5 emission limits while burning natural gas and ultra low sulfur distillate oil. Stack testing performed pursuant to REF #1 shall be considered the first required stack test under this reference, quarterly stack testing shall then continue. All quarterly stack testing shall be performed pursuant to the stack test protocol approved by the Department pursuant to REF #1, unless a modified protocol is approved by the Department. After 2 years, the permittee may request to reduce the frequency of this stack testing by submitting a permit modification application. The stack emission testing shall be conducted at worst-case operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]	Monitored by stack emission testing at the approved frequency of once each quarter. Unless otherwise approved in the stack test protocol or by the Department, each test run shall be 60 minutes in sampling duration. Compliance period shall be as specified in the monitoring requirement for each applicable emission limit. Stack tests shall be conducted for PM-2.5, while combusting natural gas and ultra low sulfur distillate oil. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Stack Test - The permittee shall contact BTS at 609-530-4041 to schedule a mutually acceptable test date for the next quarterly stack test within 60 days of performing each stack test. A full stack test report must be submitted to BTS and a certified summary test report, as described in the protocol, must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. A copy of the certified summary test results, for each test performed must be submitted with the permit modification application, if a reduction in stack test frequency is requested. The test results shall be reported in lb/hr, lb/MMBTU (HHV) and ppmvd @ 15% O2.[N.J.A.C. 7:27-22.18(e)], [N.J.A.C. 7:27-22.18(h)] and. [N.J.A.C. 7:27-22.16(o)]
4	CO <= 250 ppmvd @ 15% O2. VOC RACT emission limit applies during all operation. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
5	CO <= 250 ppmvd @ 15% O2. VOC RACT emission limit applies during all operation. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	VOC (Total) <= 50 ppmvd @ 15% O2. VOC RACT emission limit applies during all operation. [N.J.A.C. 7:27-16.9(b)]	VOC (Total): Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. Stack testing shall be performed prior to permit renewal while combusting low sulfur distillate fuel oil only. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results upon occurrence of event. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]
7	The Permittee shall adjust the combustion process in accordance with the procedure set forth at N.J.A.C. 7:27-19.16, in order to optimize the emission of NOx, CO and VOC. Adjustment of the combustion process shall be carried out according to manufacturer's recommended procedures and maintenance schedules for each turbine. [N.J.A.C. 7:27-16.9(f)2, N.J.A.C. 7:27-19.5(e)2] & [N.J.A.C. 7:27-19.16(g)]	Monitored by continuous emission monitoring system upon performing combustion adjustment Or Periodic Emission Monitoring. [N.J.A.C. 7:27-19.16(h)]	Recordkeeping by data acquisition system (DAS) / electronic data storage upon performing combustion adjustment or manual logging of parameter upon performing combustion adjustment. The records should be kept in a permanent form suitable for inspections. The owner or operator shall record the following information for each adjustment: 1. The date of the adjustment and the times at which it began and ended; 2. The name, title and affiliation of the person who performed the procedure and adjustment; 3. The type of procedure and maintenance performed; 4. The concentration of NOx, CO and O2 measured before and after the adjustment was made; and 5. The type and amount of fuel used since the last combustion adjustment was performed. [N.J.A.C. 7:27-19.16(h)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	An exceedance of an emission limit that occurs during an adjustment of the combustion process under N.J.A.C. 7:27-19.16(g) is not a violation of this subchapter if it occurs as a result of the adjustment. After the combustion adjustment has been completed, the maximum emission rate of any contaminant shall not exceed the maximum allowable emission rate applicable under this subchapter or under an operating permit issued pursuant to N.J.A.C. 7:27-22 or an applicable certificate issued pursuant to N.J.A.C. 7:27-8. [N.J.A.C. 7:27-19.16(f)]	None.	None.	None.
9	All N.J.A.C. 7:27 -22.16(a) emission limits specified in this permit for the turbines are not applicable during startup, shutdown, and during the initial startup and shakedown periods for each turbine separately. Shakedown period shall be defined as the period from the initial startup until CEMS is certified by the Department. Shakedown period shall not exceed 180 calendar days from the initial firing of the turbines. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	NOx (Total) <= 296.73 tons/yr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
11	CO <= 698.27 tons/yr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	VOC (Total) <= 94.02 tons/yr. Annual emission limit based on initial operating permit application. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations each month during operation, based on a 12 calendar month period. Calculate by using following equation: VOC tons/year = (allowable lbs/hr emission rate x sum of annual operating hours for two combustion turbines firing natural gas with duct burner on / 2000 lbs/ton) + (6.45 lbs/hr x sum of annual operating hours for two combustion turbines firing natural gas with duct burner off / 2000 lbs/ton) + (13.77 lbs/hr x sum of annual operating hours for two combustion turbines firing oil / 2000 lbs/ton). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
13	SO2 <= 35.32 tons/yr. Annual emission limit based on initial operating permit application. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by calculations each month during operation, based on a 12 calendar month period. Calculate by using following equation: SO2 tons/year= [(0.0021 (lb/MMBtu))*(hourly heat input from natural gas (MMBTU/hr))*(hours per year operating on natural gas)]/[(2000) lb/ton + [(0.0021 (lb/MMBtu))*(hourly heat input from ULSD(MMBTU/hr))*(hours per year operating on ULSD)]/[(2000) lb/ton. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
14	TSP <= 50.02 tons/yr. Annual emission limit based on initial operating permit application. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations each month during operation, based on a 12 calendar month period. Calculate by using following equation: TSP tons/year = (allowable lbs/hr x sum of annual operating hours for two combustion turbines firing natural gas with duct burner on / 2000 lbs/ton) + (6 lbs/hr x sum of annual operating hours for two combustion turbines firing natural gas with duct burner off / 2000 lbs/ton) + (17 lbs/hr x sum of annual operating hours for two combustion turbines firing oil / 2000 lbs/ton). [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	PM-2.5 (Total) <= 93.6 tons/yr. Annual emission limit based on initial operating permit application. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations daily, based on a consecutive 365 day period (rolling 1 day basis). Calculate by using following equation: PM2.5 tons/year = (allowable lbs/hr emission rate x sum of annual operating hours for two combustion turbines firing natural gas with duct burner on / 2000 lbs/ton) + (12.00 lbs/hr x sum of annual operating hours for two combustion turbines firing natural gas with duct burner off / 2000 lbs/ton) + (34 lbs/hr x sum of annual operating hours for two combustion turbines firing oil / 2000 lbs/ton). [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
16	PM-10 (Total) <= 93.6 tons/yr. Annual emission limit based on initial operating permit application. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations each month during operation, based on a 12 calendar month period. Calculate by using following equation: PM10 tons/year = (allowable lbs/hr emission rate x sum of annual operating hours for two combustion turbines firing natural gas with duct burner on / 2000 lbs/ton) + (12.0 lbs/hr x sum of annual operating hours for two combustion turbines firing natural gas with duct burner off / 2000 lbs/ton) + (34 lbs/hr x sum of annual operating hours for two combustion turbines firing oil / 2000 lbs/ton). [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
17	Pb <= 0.017 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
18	SO3 and H2SO4, as converted and expressed as H2SO4 <= 5.3 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
19	HAPs (Total) <= 9.84 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
20	Acrolein <= 0.11 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	Arsenic compounds <= 0.013 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
22	Butadiene (1,3-) <= 0.024 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
23	Formaldehyde <= 4.2 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
24	Manganese compounds <= 0.9 tons/yr. [N.J.A.C. 7:27-22.16(0)]	None.	None.	None.
25	Selenium compounds <= 0.028 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
26	Toluene <= 2.3 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
27	Turbine fuel limited to natural gas and ultra low sulfur distillate fuel oil (ULSD) [sulfur content <= 15 ppm]. [N.J.A.C. 7:27-22.16(a)]	Monitored by review of fuel delivery records per delivery . [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
28	Natural Gas Usage <= 17,298 MMft^3/yr per 365 consecutive day period, rolling one day basis (per turbine and duct burner). [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Manually or electronically log the gross heat input in Btu and fuel use in CUFT electronically (computer, DAS or electronic operating system) each day. [N.J.A.C. 7:27-22.16(o)]	None.
29	Fuel Oil Usage <= 8.18 MMgal/yr per 365 consecutive day period, rolling one day basis (per turbine). [N.J.A.C. 7:27-22.16(a)]	Fuel Oil Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Fuel Oil Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Manually or electronically log the gross heat input in Btu and fuel use in gallons electronically (computer, DAS or electronic operating system) each day. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
30	The permittee shall operate and maintain Dry Low NOx Burners, as per manufacturer's requirements, at all times, including combustion of natural gas, ULSD, and periods of start-up and shut down. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency in a permanently bound log book or readily accessible computer memories. The permittee shall maintain Dry Low NOx Burner manufacturer's specifications, and operation and maintenance manual (OM&M) on-site. [N.J.A.C. 7:27-22.16(o)]	None.
31	The Selective Catalytic Reduction system shall be used to destroy Nitrogen Oxides (NOx) resulting from combustion in the turbine, at the recommended manufacturer's operating flue gas flowrate range, such that NOx (Total) emissions as established for the turbines in this permit are met. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. The permittee shall maintain SCR system manufacturer's documentation, specifications, operation and maintenance manual on-site. [N.J.A.C. 7:27-22.16(o)]	None.
32	The SCRs (SCRs, CD102 and CD104) shall be operated at all times that the turbine is operating, except during start-up and shutdown. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously. The permittee shall record the time and duration of the operation of both the SCR and the gas turbine. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The permittee shall continuously record the time and duration of the operation of the stationary combustion engine and the selective catalytic reduction unit (SCR). [N.J.A.C. 7:27-22.16(o)]	None.
33	Temperature upstream of SCR System (CD102 and CD104) >= 550 degrees Fahrenheit, except during startups or shutdowns. The permittee shall not be considered in violation for any deviation from this requirement if corresponding NOx emissions from the gas turbine are in compliance with applicable emission limits as established in this permit. [N.J.A.C. 7:27-22.16(a)]	Monitored by temperature instrument continuously, based on a 1 hour block average. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
34	Selective Catalytic Reduction (SCRs, CD102 and CD104): NOx Percentage Removal >= 90 % (design value). The permittee shall not be considered in violation for any deviation from this requirement if corresponding NOx emissions from the gas turbine are in compliance with applicable emission limits as established in this permit. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency. The permittee shall keep SCR manufacturer's documentation, as-built performance guarantee and operation and maintenance manual on-site. [N.J.A.C. 7:27-22.16(o)]	None.
35	The permittee shall operate the Water Injection System during all periods that the gas turbine combusts ultra low sulfur distillate fuel oil (ULSD), except during start-up, or shutdown. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously, based on an instantaneous determination. The permittee shall record the time and duration of the operation of both the water injection system and the gas turbine. [N.J.A.C. 7:27-22.16(a)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The permittee shall continuously record the time and duration of the operation of the gas turbine and the water injection system. [N.J.A.C. 7:27-22.16(o)]	None.
36	Water-to-Fuel Ratio: The water-to-fuel ratio shall be within the manufacturer's recommended limits. [N.J.A.C. 7:27-22.16(a)]	Water-to-Fuel Ratio: Monitored by water-to-fuel monitoring device continuously. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Water-to-Fuel Ratio: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.
37	The Catalytic Oxidizers CD101, and CD103, shall be used to destroy carbon monoxide (CO) and volatile organic compounds (VOC) resulting from the combustion of fuel in the turbine at the recommended manufacturer's operating flue gas flowrate range. The minimum CO destruction efficiency shall be 90% (design value), such that CO and VOC (Total) emission limits, as established in this permit, are met. The permittee shall not be considered in violation for any deviation from this requirement if corresponding CO and VOC emissions from the gas turbine are in compliance with applicable emission limits as established in this permit. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by document of construction[N.J.A.C. 7:27-22.16(o)].	Other: The permittee shall maintain Catalytic Oxidizer system manufacturer's documentation, specifications, and operation & maintenance manual (O&M) on-site.[N.J.A.C. 7:27-22.16(o)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
38	The oxidation catalysts, referred by CD101 and CD103 shall be operated at all times that the turbine is operating except during start-up and shutdown. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously, based on an instantaneous determination. The permittee shall record the time and duration of the operation of both the oxidation catalyst and the gas turbine. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The permittee shall continuously record the time and duration of the operation of the gas turbine and the oxidation catalyst unit. [N.J.A.C. 7:27-22.16(o)]	None.
39	Temperature at Exit of Catalyst >= 550 and Temperature at Exit of Catalyst <= 800 degrees F Except during startup/shutdown periods. The permittee shall not be considered in violation for any deviation from this requirement if corresponding NOx emissions from the gas turbine are in compliance with applicable emission limits as established in this permit. [N.J.A.C. 7:27-22.16(a)]	Temperature at Exit of Catalyst: Monitored by temperature instrument continuously, based on a 1 hour block average. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Temperature at Exit of Catalyst: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.
40	The Catalytic Oxidizers, CD101 and CD103, array(s) shall be maintained and replaced in accordance with the recommendations and schedules of the manufacturer, based on usage rate. The SCR catalyst, CD102 and CD104, array(s) shall be maintained and replaced in accordance with the recommendations and schedules of the manufacturer and based on NOx emission levels indicated through CEM/stack testing. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by documentation of construction.[N.J.A.C. 7:27-22.16(o)].	Other: Record keeping by mannual logging of parameter or storing data in computer system. The permittee shall maintain the catalyst maintenance and replacement records on-site.[N.J.A.C. 7:27-22.16(o)].	None.
41	Comply with 40 CFR 60 Subpart A and Subpart KKKK. [40 CFR 60]	Other: Comply with 40 CFR 60 Subpart A & KKKK.[40 CFR 60].	Other: Comply with 40 CFR 60 Subpart A & KKKK.[40 CFR 60].	Other (provide description): As per the approved schedule Comply with 40 CFR 60 Subpart A & KKKK. [40 CFR 60]
42	All requests, reports, applications, submittals, and other communication required by 40 CFR 60 shall be submitted in duplicate to the EPA Region II Administrator. [40 CFR 60.4(a)]	None.	None.	Submit a report: As per the approved schedule , submit reports to EPA Region II as required by 40 CFR 60. Send information to: Director, Air and Waste Management Division, US Environmental Protection Agency, Region II, 290 Broadway, New York, NY 10007-1866. [40 CFR 60.4(a)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
43	Submit copy of all requests, reports, applications, submittals, and other communication required by 40 CFR 60 to the Southern Regional Enforcement Office of NJDEP. [40 CFR 60.4(b)]	None.	None.	Submit a report: Other : Submit reports to the Southern Regional Office as required by 40 CFR 60. Submit to: Southern Regional Office New Jersey Department of Environmental Protection One Port Center 2 Riverside Drive, Suite 201 Camden, NJ 08102. [40 CFR 60.4(b)]
44	The owner or operator subject to the provisions of 40 CFR Part 60, shall notify the Department in writing, of the date of construction or reconstruction of the facility as defined under 40 CFR Part 60 Subpart A. Notification shall be postmarked no later than 30 days after such date. [40 CFR 60.7(a)(1)]	None.	None.	Submit a report: As per the approved schedule. The permittee shall notify the Department within thirty (30) days from the date of construction. [40 CFR 60.7(a)(1)]
45	A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in Section 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]	None.	None.	Comply with the requirement: Upon occurrence of event submit notification to EPA Region II and the Southern Regional Office per 40 CFR 60.7. [40 CFR 60.7(a)(4)]
46	Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]	None.	Other: Manual logging of the parameters specified in 40 CFR 60.7(b) in a permanently bound log book. Upon occurrence of event. (See Applicable Requirement).[40 CFR 60.7(b)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
47	The owner or operator shall submit to the Administrator, for each pollutant monitored, an excess emissions and monitoring systems performance report and a summary report form. [40 CFR 60.7(c)]	None.	None.	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Semi-annually beginning on the 30th day of the 6th month following initial performance tests electronically through the NJDEP online EEMPR web portal. The report shall be postmarked by the 30th day following the end of each calendar half. The report shall be submitted and be in a format as specified at 40 CFR 60.7(c) and 40 CFR 60.7(d). [40 CFR 60.7(c)]
48	Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. [40 CFR 60.7(f)]	None.	Recordkeeping by manual logging of parameter continuously. The parameters shall include continuous monitoring system, monitoring device, and performance testing measurements), all continuous monitoring system performance evaluations, all continuous monitoring system or monitoring device calibration checks, all adjustments-maintenance performed on these systems or devices, and all other information required by 40 CFR Part 60. All records shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [40 CFR 60.7(f)]	None.
49	Within 60 days after achieving the maximum production rate at which the affected facility will operate, but not later than 180 days after initial startup of the facility, the owner or operator shall conduct performance test(s) and shall furnish the Administrator a written report of the results. [40 CFR 60.8(a)]	None.	None.	Submit a report: At a common schedule agreed upon by the operator and the Administrator. The owner or operator shall submit results of the performance test(s) to the Administrator. [40 CFR 60.8(a)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
50	Performance tests shall be conducted under conditions the Administrator specifies to the plant operator based on representative performance of the facility. Operations during periods of startup, shutdown and malfunction shall not constitute representative conditions for the purpose of the performance test nor shall emissions in excess of the level of the applicable emission limit be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]	None.	None.	None.
51	The owner or operator shall provide the Administrator at least 30 days prior notice of any performance test and shall provide adequate performance testing facilites as specified in 40 CFR Part 60.8(e).[40 CFR 60.8(d)].	None.	None.	Submit a report: As per the approved schedule. Written notification shall be submitted to the NJDEP Southern Regional Office at least 30-days prior to any performance test. The permittee shall provide adequate performance testing facilities as specified in 40 CFR Part 60.8(e). [40 CFR 60.8(d)]
52	Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. [40 CFR 60.8(f)]	None.	None.	None.
53	Compliance with NSPS standards specified in this permit, other than opacity, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in NSPS. [40 CFR 60.11(a)]	None.	None.	None.
54	At all times, including periods of startup, shutdown, and malfunctions, owners and operators shall, to the extent practible, maintain and operate the facility, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing air emissions. [40 CFR 60.11(d)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
55	No owner or operator subject to the provisions of this part shall build, errect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]	None.	None.	None.
56	All continuous emission monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests specified under 40 CFR Part 60.8. The owner or operator shall follow manufacturer's written recommendations for installation, operation and calibration of the device [40 CFR 60.13(b)]	Other: During any performance test required under 40 CFR Part 60.8 or within 30 days thereafter, the owner or operator shall conduct a performance evaluation of the continuous emission monitoring system in accordance with applicable performance specification in Appendix B of 40 CFR Part 60[40 CFR 60.13(c)].	None.	Submit a report: As per the approved schedule , within 60 days of completion of the performance test, furnish the Administrator two or, upon request, more copies of the results of the performance evaluation. [40 CFR 60.13(c)(2)]
57	The owner or operator shall perform calibrations and span adjustments for continuous emission monitors and continuous opacity monitors following procedures outlined in 40 CFR 60.13 (d) 1 & 2. [40 CFR 60.13(d)]	None.	Other: Maintain records in accordance with 40 CFR 60.7(f).[40 CFR 60.13(d)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
58	NOx (Total) <= 15 ppmvd @ 15% O2. This limit applies to a turbine that has heat input at peak load greater than 850 MMBtu/hr (HHV) firing natural gas and commenced construction, modification or reconstruction after February 18, 2005. [40 CFR 60.4320(a)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The owner or operator shall conduct an initial performance test as required in 40 CFR 60.8. The subsequent testing shall only be conducted if choosing to comply with 40 CFR 60.4340(a). Test methods and procedures shall be consistent with the requirements of 40 CFR 60.4400 or, if a NOx diluent CEMS is installed, consistent with 40 CFR 60.4405. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Alternatively, the testing might be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. For turbines with supplemental duct burner NOx measurements shall be taken after the duct burner, which has to be in operation during the performance test. [40 CFR 60.4400]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously or Recordkeeping by stack test results at the approved frequency. [40 CFR 60.4460]	Submit a report: As per the approved schedule. The owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.4375(b)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
59	NOx (Total) <= 42 ppmvd @ 15% O2 of useful output. This limit applies to a turbine that has heat input at peak load greater than 850 MMBtu/hr (HHV) firing fuels other than natural gas and commenced construction, modification or reconstruction after February 18, 2005. [40 CFR 60.4320(a)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. The owner or operator shall conduct an initial performance test as required in 40 CFR 60.8. Test methods and procedures shall be consistent with the requirements of 40 CFR 60.4400 or, if a NOx diluent CEMS is installed, consistent with 40 CFR 60.4405. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Alternatively, the testing might be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. For turbines with supplemental duct burner NOx measurements shall be taken after the duct burner, which has to be in operation during the performance test. [40 CFR 60.4400]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously or Recordkeeping by stack test results at the approved frequency. [40 CFR 60.4460]	Submit a report: As per the approved schedule. The owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.4375(b)]
60	The owner or operator shall operate and maintain the subject stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown and malfunction. [40 CFR 60.4333(a)]	None.	None.	None.
61	The owner or operator may, as alternative to operating the continuous monitoring system described in 40 CFR 60.4335(a), install, certify, maintain, and operate a continuous emission monitoring system (CEMS) consisting of a NOx monitor and a diluent gas O2 or CO2 monitors to determine the hourly NOx emission rate in ppm or lb/MMBtu. [40 CFR 60.4335(b)(1)]	Monitored by continuous emission monitoring system continuously. [40 CFR 60.4335(b)(1)]	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
62	The owner or operator of a turbine that uses steam or water injection shall install, calibrate, maintain and operate a fuel flow meter to continuously measure the heat input to the affected unit. [40 CFR 60.4335(b)(2)]	Monitored by fuel flow/firing rate instrument continuously. Each fuel flowmeter shall be installed, calibrated, maintained and operated according to the manufacturer's instructions. Alternatively, with the NJDEP approval, fuel flowmeters that meet the installation, certification, and quality assurance requirements of appendix D to 40 CFR 75 are acceptable. [40 CFR 60.4345(c)]	Other: The permittee shall record time in which the data for fuel flow rate are either missing or invalid. [40 CFR 60.4380(b)(2)].	None.
63	The permittee shall install and certify a NOx diluent CEMS in accordance with appendix A to 40 CFR 75. The relative accuracy test audit (RATA) shall be performed on a lb/MMBtu basis. [40 CFR 60.4345(a)]	Monitored by continuous emission monitoring system continuously. During each full unit operating hour, both the NOx monitor and the diluent monitor must complete a minimum of one cycle of operation (Sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour, as specified in 40 CFR 60.13(e)(2). The permittee shall follow procedure described in 40 CFR 60.4345(b) for partial unit operating hours. [40 CFR 60.4345(b)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. The permittee shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment. For NOx CEMS and fuel flow meters, the QA program and plan described in section 1 of appendix B to 40 CFR 75 may, with state approval, satisfy this requirement. [40 CFR 60.4345(e)]	None.
64	The permittee shall install, calibrate, maintain, and operate each fuel flowmeter in accordance with the manufacturer's instructions or in accordance with the requirements of appendix D to 40 CFR 75. [40 CFR 60.4345(c)]	Monitored by fuel flow/firing rate instrument continuously. Each fuel flowmeter shall be installed, calibrated, maintained and operated according to the manufacturer's instructions. Alternatively, with the NJDEP approval, fuel flowmeters that meet the installation, certification, and quality assurance requirements of appendix D to 40 CFR 75 are acceptable. [40 CFR 60.4345(c)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. The permittee shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment. For NOx CEMS and fuel flow meters, the QA program and plan described in section 1 of appendix B to 40 CFR 75 may, with state approval, satisfy this requirement. [40 CFR 60.4345(e)]	None.
65	The permittee shall install, calibrate, maintain, and operate each watt meter, steam flow meter, and each pressure or temperature measurement device in accordance with the manufacturer's instructions. [40 CFR 60.4345(d)]	Other: The gross electrical output of the unit in megawatt-hours shall be monitored continuously by watt meter (or meters) and shall be installed, calibrated, maintained and operated according to the manufacturer's instructions.[40 CFR 60.4345(d)].	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. The permittee shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment. [40 CFR 60.4345(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
66	The owner or operator may elect not to monitor the total sulfur content of the fuel combusted in the turbine if the fuel is demonstrated not to exceed potential sulfur emissions of 0.06 lb SO2/MMBtu heat input for units located in continental areas. [40 CFR 60.4365]	Other: The required demonstration that the total sulfur content of the fuel does not exceed potential sulfur emissions of 0.06 lb SO2/MMBtu shall be made using a current valid purchase contract, tariff sheet or transportation contract specifying that in continental areas the maximum total sulfur content for oil use is 0.05 weight percent (500ppmw) and for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet.[40 CFR 60.4365(a)].	Recordkeeping by fuel certification receipts at the approved frequency. The owner or operator shall keep copies of valid purchase contracts, tariff sheets or transportation contracts specifying that in continental areas the maximum total sulfur content for oil use is 0.05 weight percent (500 ppmw) and for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365]	Demonstrate compliance: Once initially. The owner or operator shall submit the required determination to the Administrator using the sources of information described in 40 CFR 60.4365(a) showing the maximum total sulfur content for continental areas for oil use at 0.05 weight percent or less and for natural gas at 20 grains of sulfur or less per 100 standard cubic feet or to demonstrate that fuel has potential sulfur emissions of less than 0.060 lb SO2 /MMBtu heat input. [40 CFR 60.4365(a)]
67	The owner or operator shall submit reports of excess emissions and monitor downtime in accordance with 40 CFR 60.7(c) for Nitrogen oxides. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. An excess emissions as defined in 40 CFR 60.4380(b)1 is any unit operating period in which the 30-day rolling average NOx emission rate exceeds the applicable emission limit in 40 CFR 60.4320. A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NOx concentration, CO2 or O2 concentration, fuel flow rate, steam flow rate, steam temperature, steam pressure, or megawatts. The steam flow rate, steam temperature, and steam pressure are only required if used for compliance demonstration. [40 CFR 60.4380(b)]	Other: For the purposes of identifying excess emissions based on data from the continuous emission monitoring equipment the permittee shall follow procedures described in 40 CFR 60.4350(a), (b), (c), (e), (f), (g), and (h). If a NOx diluent CEMS meets the requirements of 40 CFR 75, then only quality assured data from the CEMS shall be used to identify excess emissions. Periods where the missing data substitution procedures in subpart D of 40 CFR 75 are applied are to be reported as monitor downtime.[40 CFR 60.4350].	None.	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Semi-annually beginning on the 30th day of the 6th month following initial performance tests. All reports required under 40 CFR 60.7(c) must be postmarked by the 30th day following the end of each 6-month period. [40 CFR 60.4395]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
68	The owner or operator shall submit reports of excess emissions and monitor downtime for Sulfur content in the fuel. An excess emissions as defined in 40 CFR 60.4385(a) and (b) occurs each unit hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrate compliance with the sulfur limit. A period of monitor downtime begins when a required sample is not taken by its due date or if a sample is taken but invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample. [40 CFR 60.4385]	None.	None.	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Semi-annually beginning on the 30th day of the 6th month following initial performance tests. All reports required under 40 CFR 60.7(c) must be postmarked by the 30th day following the end of each 6-month period. [40 CFR 60.4395]
69	Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit. [40 CFR 72]	Other: Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit.[40 CFR 72].	Other: Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit.[40 CFR 72].	Other (provide description): As per the approved schedule Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit. [40 CFR 72]
70	NOx and VOC Emission Offsets: 394.16 tons of NOx offsets, and 123.11 tons of VOC (total) offsets that meet the criteria established in N.J.A.C. 7:27-18.1 et. seq. for NOx and VOC (total) emissions, must be acquired prior to the initial startup of the facility. [N.J.A.C. 7:27-18.3(c)1]	None.	None.	Submit documentation of compliance: Once initially. Obtain emission offsets and submit Purchase Agreement to the Chief, Bureau of Air Quality Permitting, and REO, prior to initial startup of the facility. [N.J.A.C. 7:27-18.18(c)1]
71	The permittee shall submit an Excess Emission Monitoring Performance Report to the appropriate Regional Enforcement Office (REO) for review and approval. This report shall be submitted to the REO whether or not an emission exceedance has occurred. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system at no required frequency. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
72	The owner or operator shall develop a QA/QC plan for all CEMS/COMS required by this permit. This QA/QC plan shall incorporate at a minimum those procedures outlined in 40 CFR, Part 60, Appendix F and/or 40 CFR, Part 75, Appendix B for CEMS and those procedures outlined in 40 CFR, Part 60, Appendix B, Specification One and 40 CFR, Part 51, Proposed RM 203 for COMS, published Department Technical Manuals or other procedures approved in writing by the Department. The QA/QC plan shall designate a coordinator for the facility who is responsible to ensure that the QA/QC plan is implemented. The Department reserves the right to require the QA/QC plan to be revised at any time based on the results of quarterly EEMPR reviews, inspections, audits or any other information available to the Department. All procedures outlined in the QA/QC plan shall commence upon the completion date of the PST. All redundant CEMS/COMS must undergo the QA/QC procedure. [N.J.A.C. 7:27-22.16(a)] [N.J.A.C. 7:27-22.16(a)]	Other: The QA/QC coordinator shall be responsible for reviewing the QA/QC plan on an annual basis.[N.J.A.C. 7:27-22.16(o)].	Other: Maintain readily accessible records of the QA/QC plan including QA date and quarterly reports.[N.J.A.C. 7:27-22.16(o)].	Submit a report: Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). All quarterly and annual QA data shall be included in quarterly EEMPR reports and kept on file at the facility. The QA data must be made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]. [N.J.A.C. 7:27-22.16(o)]

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Emission Unit: **U1 Combined Cycle Turbines - 600 MW, natural gas / ULSD fired**

Operating Scenario: **OS1 Turbine 1 (with or without duct burner) - NG, OS5 Turbine 2 (with or without duct burner) - NG**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %. Smoke emissions from stationary turbine engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
2	Opacity <= 10 % , exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Particulate Emissions <= 226.2 lb/hr Particulate emission limit from the combustion of natural gas based on rated heat input of 2,262 MMBtu/hr for each turbine (without duct burner). [N.J.A.C. 7:27- 4.2(a)]	Particulate Emissions: Monitored by stack emission testing once initially, based on each of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	Particulate Emissions: Recordkeeping by stack test results once initially. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]
4	Particulate Emissions <= 270.6 lb/hr Particulate emission limit from the combustion of natural gas based on rated heat input of 2,706 MMBtu/hr for each turbine and duct burner. [N.J.A.C. 7:27-4.2(a)]	Particulate Emissions: Monitored by stack emission testing once initially, based on each of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	Particulate Emissions: Recordkeeping by stack test results once initially. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]
5	Maximum Gross Heat Input <= 444 MMBTU/hr (HHV) per duct burner firing natural gas. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.
6	Maximum Gross Heat Input <= 2,262 MMBTU/hr (HHV) per turbine firing natural gas. [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(a)]	None.
7	Maximum Gross Heat Input <= 2,706 MMBTU/hr (HHV) for each duct burner and combustion turbine firing natural gas. [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	NOx (Total) <= 0.15 lb/MMBTU. NOx RACT emission limit applies during all periods of natual gas combustion. [N.J.A.C. 7:27-19.5(b)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-21.16(o)]
9	NOx (Total) <= 0.15 lb/MMBTU. NOx RACT emission limit applies during all periods of natual gas combustion. [N.J.A.C. 7:27-19.5(b)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-21.16(o)]
10	NOx (Total) <= 2 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
11	NOx (Total) <= 2 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
12	NOx (Total) <= 0.01 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
13	NOx (Total) <= 0.01 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]

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14	NOx (Total) <= 22.91 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
15	NOx (Total) <= 22.91 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
16	CO <= 2 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
17	CO <= 2 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
18	CO <= 0.01 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
19	CO <= 0.01 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	CO <= 13.95 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
21	CO <= 13.95 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
22	VOC (Total) <= 1.9 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 and Ref. # 2 for details). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results once initially. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]
23	VOC (Total) <= 7.59 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 and Ref. # 2 for details). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results once initially. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]
24	SO2 <= 5.66 lb/hr. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by stack emission testing once initially, based on each of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by stack test results once initially. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-21.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]
25	TSP <= 10.44 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing once initially, based on each of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results once initially. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
26	PM-2.5 (Total) <= 18.66 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. Once initially and every quarter thereafter. (Please see U1/OS Summary/ Ref. #1, 2 & 3 for details). [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by stack test results at the approved frequency. Once initially and every quarter thereafter. (Please see U1/OS Summary/ Ref. #1, 2 & 3 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1, 2 & 3 for details). [N.J.A.C. 7:27-22.16(o)]
27	PM-10 (Total) <= 18.66 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
28	Ammonia <= 5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	Ammonia: Monitored by stack emission testing once initially and prior to permit renewal, based on each of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Ammonia: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
29	Lead compounds <= 0.00022 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
30	SO3 and H2SO4, as converted and expressed as H2SO4 <= 0.85 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
31	HAPs <= 1.41 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
32	Acrolein <= 0.0145 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
33	Formaldehyde <= 0.576 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
34	Toluene <= 0.296 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
35	Turbine fuel limited to natural gas. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by invoices / bills of lading per delivery. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U1 Combined Cycle Turbines - 600 MW, natural gas / ULSD fired**

Operating Scenario: **OS2 Turbine 1 - ULSD**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %. Smoke emissions from stationary turbine engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	Opacity: Monitored by visual determination at the approved frequency, based on an instantaneous determination. A certified smoke reader shall conduct visual observations once every 100 hours of ultra low sulfur distillate fuel oil (ULSD) operation using NJ Test Method 2. Monitoring and recordkeeping may occur at a lesser frequency if circumstances prohibit conducting a visual determination (e.g., nighttime operation, weather conditions, unplanned dispatching, etc.) within the 100-hour timeframe. However, in no case shall the interval between visual determinations exceed 125 hours of ULSD fired operation. If the visual observation occurs at a lesser frequency than every 100 hours of ULSD operation, the reason for monitoring at the lesser frequency shall also be recorded. [N.J.A.C. 7:27-22.16(o)]	Opacity: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	Opacity <= 10 % , exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27-22.16(a)]	Opacity: Monitored by visual determination at the approved frequency, based on an instantaneous determination. A certified smoke reader shall conduct visual observations once every 100 hours of ultra low sulfur distillate fuel oil (ULSD) operation using NJ Test Method 2. Monitoring and recordkeeping may occur at a lesser frequency if circumstances prohibit conducting a visual determination (e.g., nighttime operation, weather conditions, unplanned dispatching, etc.) within the 100-hour timeframe. However, in no case shall the interval between visual determinations exceed 125 hours of ULSD fired operation. If the visual observation occurs at a lesser frequency than every 100 hours of ULSD operation, the reason for monitoring at the lesser frequency shall also be recorded. [N.J.A.C. 7:27-22.16(o)]	Opacity: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	None.
3	Particulate Emissions <= 227 lb/hr Particulate emission limit from the combustion of ULSD, based on rated heat input of 2,270 MMBtu/hr for each turbine. [N.J.A.C. 7:27- 4.2(a)]	Particulate Emissions: Monitored by stack emission testing once initially and prior to permit renewal, based on each of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Particulate Emissions: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
4	Sulfur Content in Fuel <= 0.2 % by weight. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
5	Sulfur Content in Fuel <= 0.0015 % by weight. [N.J.A.C. 7:27-22.16(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
6	Maximum Gross Heat Input <= 2,270 MMBTU/hr (HHV) per turbine firing ULSD. [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	NOx (Total) <= 0.35 lb/MMBTU. NOx RACT emission limit applies during all periods of ULSD combustion. [N.J.A.C. 7:27-19.5(b)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-21.16(o)]
8	NOx (Total) <= 0.35 lb/MMBTU. NOx RACT emission limit applies during all periods of ULSD combustion. [N.J.A.C. 7:27-19.5(b)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-21.16(o)]
9	NOx (Total) <= 3.5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
10	NOx (Total) <= 3.5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
11	NOx (Total) <= 34.55 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
12	NOx (Total) <= 34.55 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	CO <= 3 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
14	CO <= 3 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
15	CO <= 18.03 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
16	CO <= 18.03 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
17	VOC (Total) <= 4 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
18	VOC (Total) <= 13.77 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	SO2 <= 4.64 lb/hr. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by stack emission testing once initially, based on each of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by stack test results once initially. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-21.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]
20	TSP <= 17 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing once initially and prior to permit renewal, based on each of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
21	PM-2.5 (Total) <= 34 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. Once initially and every quarter thereafter. (Please see U1/OS Summary/ Ref. #1, 2 & 3 for details). [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by stack test results at the approved frequency. Once initially and every quarter thereafter. (Please see U1/OS Summary/ Ref. #1, 2 & 3 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule (Please see U1/OS Summary/ Ref. #1, 2 & 3 for details). [N.J.A.C. 7:27-22.16(o)]
22	PM-10 (Total) <= 34 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
23	Ammonia <= 5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	Ammonia: Monitored by stack emission testing once initially and prior to permit renewal, based on each of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Ammonia: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
24	Turbine fuel limited to ultra low sulfur distillate fuel oil (ULSD) [sulfur content <= 15 ppm]. [N.J.A.C. 7:27-22.16(a)]	Monitored by review of fuel delivery records per delivery . [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
25	HAPs <= 2.78 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
26	Arsenic compounds <= 0.025 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
27	Butadiene (1,3-) <= 0.036 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
28	Manganese compounds <= 1.8 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
29	Selenium compounds <= 0.057 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U1 Combined Cycle Turbines - 600 MW, natural gas / ULSD fired**

Operating Scenario: **OS3 Turbine 1 - Start-up/Shutdown, OS7 Turbine 2 - Start-up/Shutdown**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %. Smoke emissions from stationary turbine engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
2	Particulate Emissions <= 226.2 lb/hr Particulate emission limit from the combustion of natural gas based on rated heat input of 2,262 MMBtu/hr for each turbine (without duct burner). [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Particulate Emissions <= 270.6 lb/hr Particulate emission limit from the combustion of natural gas based on rated heat input of 2,706 MMBtu/hr for each turbine and duct burner. [N.J.A.C. 7:27-4.2(a)]	None.	None.	None.
4	Particulate Emissions <= 227 lb/hr Particulate emission limit from the combustion of ULSD, based on rated heat input of 2,270 MMBtu/hr for each turbine (without duct burner). [N.J.A.C. 7:27-4.2(a)]	None.	None.	None.
5	Sulfur Content in Fuel <= 0.2 % by weight. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
6	Sulfur Content in Fuel <= 0.0015 % by weight. [N.J.A.C. 7:27-22.16(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
7	NOx (Total) <= 0.15 lb/MMBTU. NOx RACT emission limit applies during all periods of natual gas combustion. [N.J.A.C. 7:27-19.5(b)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-21.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	NOx (Total) <= 0.35 lb/MMBTU. NOx RACT emission limit applies during all periods of ULSD combustion. [N.J.A.C. 7:27-19.5(b)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-21.16(o)]
9	Start-up Period: Start-up is defined as the period of time from initiation of combustion turbine operation until it achieves steady-state emissions compliance. The exemption from N.J.A.C. 7:27-22.16(a) emission limits during start-up shall not exceed 5 hours. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Shutdown Period <= 1 hours. Shutdown is defined as the period of time from initiation of lowering combustion turbine power output with the intent to cease generation of electrical power output and concludes with the cessation of the combustion turbine operation. The exemption from N.J.A.C. 7:27-22.16(a) emission limits during shutdown shall not exceed 1 hour. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U1 Combined Cycle Turbines - 600 MW, natural gas / ULSD fired**

Operating Scenario: **OS6 Turbine 2 - ULSD**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %. Smoke emissions from stationary turbine engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	Opacity: Monitored by visual determination at the approved frequency, based on an instantaneous determination. A certified smoke reader shall conduct visual observations once every 100 hours of ultra low sulfur distillate fuel oil (ULSD) operation using NJ Test Method 2. Monitoring and recordkeeping may occur at a lesser frequency if circumstances prohibit conducting a visual determination (e.g., nighttime operation, weather conditions, unplanned dispatching, etc.) within the 100-hour timeframe. However, in no case shall the interval between visual determinations exceed 125 hours of ULSD fired operation. If the visual observation occurs at a lesser frequency than every 100 hours of ULSD operation, the reason for monitoring at the lesser frequency shall also be recorded. [N.J.A.C. 7:27-22.16(o)]	Opacity: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	Opacity <= 10 % , exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27-22.16(a)]	Opacity: Monitored by visual determination at the approved frequency, based on an instantaneous determination. A certified smoke reader shall conduct visual observations once every 100 hours of ultra low sulfur distillate fuel oil (ULSD) operation using NJ Test Method 2. Monitoring and recordkeeping may occur at a lesser frequency if circumstances prohibit conducting a visual determination (e.g., nighttime operation, weather conditions, unplanned dispatching, etc.) within the 100-hour timeframe. However, in no case shall the interval between visual determinations exceed 125 hours of ULSD fired operation. If the visual observation occurs at a lesser frequency than every 100 hours of ULSD operation, the reason for monitoring at the lesser frequency shall also be recorded. [N.J.A.C. 7:27-22.16(o)]	Opacity: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(o)]	None.
3	Particulate Emissions <= 227 lb/hr Particulate emission limit from the combustion of ULSD, based on rated heat input of 2,270 MMBtu/hr for each turbine. [N.J.A.C. 7:27- 4.2(a)]	Particulate Emissions: Monitored by stack emission testing once initially and prior to permit renewal, based on each of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Particulate Emissions: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
4	Sulfur Content in Fuel <= 0.2 % by weight. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
5	Sulfur Content in Fuel <= 0.0015 % by weight. [N.J.A.C. 7:27-22.16(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
6	Maximum Gross Heat Input <= 2,270 MMBTU/hr (HHV) per turbine firing ULSD. [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	NOx (Total) <= 0.35 lb/MMBTU. NOx RACT emission limit applies during all periods of ULSD combustion. [N.J.A.C. 7:27-19.5(b)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-21.16(o)]
8	NOx (Total) <= 0.35 lb/MMBTU. NOx RACT emission limit applies during all periods of ULSD combustion. [N.J.A.C. 7:27-19.5(b)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-21.16(o)]
9	NOx (Total) <= 3.5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
10	NOx (Total) <= 3.5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
11	NOx (Total) <= 34.55 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
12	NOx (Total) <= 34.55 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	CO <= 3 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
14	CO <= 3 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
15	CO <= 18.03 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
16	CO <= 18.03 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
17	VOC (Total) <= 4 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
18	VOC (Total) <= 13.77 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	SO2 <= 4.64 lb/hr. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by stack emission testing once initially, based on each of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by stack test results once initially. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-21.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]
20	TSP <= 17 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing once initially and prior to permit renewal, based on each of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
21	PM-2.5 (Total) <= 34 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
22	PM-10 (Total) <= 34 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
23	Ammonia <= 5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	Ammonia: Monitored by stack emission testing once initially and prior to permit renewal, based on each of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Ammonia: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
24	Turbine fuel limited to ultra low sulfur distillate fuel oil (ULSD) [sulfur content <= 15 ppm]. [N.J.A.C. 7:27-22.16(a)]	Monitored by review of fuel delivery records per delivery . [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U2 Cooling Towers (multicell)**
Operating Scenario: **OS Summary**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 7.8 lb/hr based on 0.02 grains per SCF (maximum SCF emitted from emission point). [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
2	Opacity <= 20 %. No Person shall cause, suffer, allow or permit particles to be emitted from any stack or chimney into the outdoor air the shade or appearance of which is greater than 20 percent opacity, exclusive of condensed water vapor, except for a period of not longer than three minutes in any consecutive 30-minute period. [N.J.A.C. 7:27- 6.2(d)]	None.	None.	None.
3	TSP <= 7.83 tons/yr for two cooling towers. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	PM-2.5 (Total) <= 1.97 tons/yr for two towers. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-10 (Total) <= 5.18 tons/yr for two cooling towers. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	Water treatment chemicals containing hexavalent chromium shall not be added to the circulating water [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records of raw materials used in recirculation water.[N.J.A.C. 7:27-22.16(o)].	None.
7	The raw materials shall be limited to the following or equivalent: 1. 5% phosphonate 10% acrylate (3D TRASAR 3DT195) (containing upto 1% methanol) 2. Bleach 12.5% 3. 66 Be' Sulfuric Acid 93.2% [N.J.A.C. 7:27-22.16(a)]	Other: By review of process records showing materials/chemicals added/mixed.[N.J.A.C. 7:27-22.16(o)].	Other: Maintain process records showing list of materials/chemicals added/mixed.[N.J.A.C. 7:27-22.16(o)].	None.
8	Total Material Transferred <= 940 tons/yr of chemical additives for two cooling towers (For a list of chemical additives, see Attachment A). Maximum throughput rate based on operating permit application. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring continuously. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: Recordkeeping by manual logging of parameter each week during operation in a permanently bound log book or readily accessible computer memory showing type of raw materials and amount of each chemical added with sum-to-date. [N.J.A.C. 7:27-22.16(o)]	None.

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Emission Unit: **U2 Cooling Towers (multicell)**

Operating Scenario: **OS1 Cooling Tower 1 - Normal Operation, OS2 Cooling Tower 2 - Normal Operation**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Cooling tower circulation water flow rate <= 85,000 gallons per minute (gpm) per cooling tower, based on operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Total Disolved Solids (TDS) concentration in the cooling tower circulating water =<4,200 mg/liter. [N.J.A.C. 7:27-22.16(a)]	Monitored by grab sampling each month during operation for analysis of circulating water. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. Maintain records of circulating water analysis. [N.J.A.C. 7:27-22.16(o)]	None.
3	TSP <= 0.89 lb/hr per cooling tower. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations each month during operation : TSP (lb/hr) = 0.000501 x D x C x TDS; where: D = fraction of circulating water lost to drift = 0.0005% C = circulating water rate (gal/min) = 85,000 gal/min (based on maximum capacity of cooling tower) TDS = total dissolved solids concentration in circulating water (mg/l) A sample of the circulating water will be taken a minimum of every month and analyzed for TDS. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation Records shall be maintained on site for a period of five (5) years after the date of each record and made available to the representatives of the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Annually on January 31 for the preceding calendar year. The report shall be submitted to the NJDEP Southern Regional Enforcement Office. The report must contain: 1. A log of the total dissolved solids concentration of the circulating water flow. A sample will be taken and recorded during Cooling Tower operation a minimum of every month in which the Cooling Tower operates; 2. The calculated maximum hourly particulate emissions in pounds per hour; 3. The calculated maximum cumulative particulates emissions in tons per year; and 4. Description of any maintenance procedures applied to the cooling tower. [N.J.A.C. 7:27-21.16(o)]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	PM-2.5 (Total) <= 0.22 lb/hr per cooling tower. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations each month during operation : PM-2.5 (lb/hr) = 0.000501 x D x C x TDS x A; where: D = fraction of circulating water lost to drift = 0.0005%, C = circulating water rate (gal/min) = 85,000 gal/min (based on maximum capacity of cooling tower), TDS = total dissolved solids concentration in circulating water (mg/l), A = PM-2.5 fraction A sample of the circulating water will be taken a minimum of every month and analyzed for TDS. [N.J.A.C. 7:27-22.16(o)]	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation Records shall be maintained on site for a period of five (5) years after the date of each record and made available to the representatives of the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Annually on January 31 for the preceding calendar year. The report shall be submitted to the NJDEP Southern Regional Enforcement Office. The report must contain: 1. A log of the total dissolved solids concentration of the circulating water flow. A sample will be taken and recorded during Cooling Tower operation a minimum of every month in which the Cooling Tower operates; 2. The calculated maximum hourly particulate emissions in pounds per hour; 3. The calculated maximum cumulative particulates emissions in tons per year; and 4. Description of any maintenance procedures applied to the cooling tower. [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	PM-10 (Total) <= 0.59 lb/hr per cooling tower. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations each month during operation : PM-10 (lb/hr) = 0.000501 x D x C x TDS x A; where: D = fraction of circulating water lost to drift = 0.0005%, C = circulating water rate (gal/min) = 85,000 gal/min (based on maximum capacity of cooling tower), TDS = total dissolved solids concentration in circulating water (mg/l), A = PM-10 fraction. A sample of the circulating water will be taken a minimum of every month and analyzed for TDS. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation Records shall be maintained on site for a period of five (5) years after the date of each record and made available to the representatives of the Department upon request. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Annually on January 31 for the preceding calendar year. The report shall be submitted to the NJDEP Southern Regional Enforcement Office. The report must contain: 1. A log of the total dissolved solids concentration of the circulating water flow. A sample will be taken and recorded during Cooling Tower operation a minimum of every month in which the Cooling Tower operates; 2. The calculated maximum hourly particulate emissions in pounds per hour; 3. The calculated maximum cumulative particulates emissions in tons per year; and 4. Description of any maintenance procedures applied to the cooling tower. [N.J.A.C. 7:27-22.16(o)]
6	Total Material Transferred <= 470 tons/yr of chemical additives for two cooling towers (For a list of chemical additives, see Attachment A). Maximum throughput rate based on operating permit application. [N.J.A.C. 7:27-22.16(a)]	Total Material Transferred: Monitored by material feed/flow monitoring continuously. [N.J.A.C. 7:27-22.16(o)]	Total Material Transferred: Recordkeeping by manual logging of parameter or storing data in a computer data system each week during operation in a permanently bound log book or readily accessible computer memory showing type of raw materials and amount of each chemical added with sum-to-date. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U3 Emergency Generator - 750 kW, ULSD fired**
Operating Scenario: **OS Summary**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 2.65 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	CO <= 1.45 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	VOC (Total) <= 0.16 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	TSP <= 0.08 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 0.08 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-10 (Total) <= 0.08 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	The owner or operator of a 2007 model year and later emergency generator with a displacement of < 10 liters per cylinder and a maximum engine power >= 37 kW (50 HP) and no greater than 3,000HP (<= 2,237 kW) must comply with the certification emissions standards in 40 CFR 89.112 and smoke standards in 40 CFR 89.113 for the same model year and maximum engine power as follows: NMHC + NOx <= " 6.4 " g/KW-hr, CO <= " 3.5" g/KW-hr, PM <= " 0.2" g/KW-hr. [40 CFR 60.4205(b)]	None.	Other: The owner or operator of a 2007 model year or later engine must keep manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power. [40 CFR 60.4211].	None.
8	The owner or operator of a 2007 model year and later stationary CI internal combustion engine complying with the emission standards specified in 40 CFR 60.4204(b) or 40 CFR 60.4205(b), must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b) or 40 CFR 60.4205(b) as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. [40 CFR 60.4211(c)]	None.	Other: The owner or operator must keep documentation for the life of the equipment from the manufacturer that the engine is certified to meet the emission standards as applicable, for the same model year and maximum engine power. [40 CFR 60.4211(c)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U3 Emergency Generator - 750 kW, ULSD fired**
Operating Scenario: **OS1 EM Gen 1 - Normal Operation**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %. Smoke emissions from stationary internal combustion engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	Opacity: Monitored by visual determination at the approved frequency, based on an instantaneous determination. A certified smoke reader shall conduct visual observations once every 100 hours of ULSD operation using NJ Test Method 2. Monitoring and recordkeeping may occur at a lesser frequency if circumstances prohibit conducting a visual determination (e.g., nighttime operation, weather conditions, unplanned dispatching, etc.) within the 100-hour timeframe. However, in no case shall the interval between visual determinations exceed 125 hours of oil firing operation. If the visual observation occurs at a lesser frequency than every 100 hours of ULSD operation, the reason for monitoring at the lesser frequency shall also be recorded. [N.J.A.C. 7:27-22.16(o)]	Opacity: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(a)]	None.
2	Particulate Emissions <= 4.2 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Sulfur Content in Fuel <= 0.2 % by weight. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
4	Sulfur Content in Fuel <= 0.0015 % by weight. [N.J.A.C. 7:27-22.16(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
5	Maximum Gross Heat Input <= 7 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	The emergency generator shall be located at the facility and produce mechanical or thermal energy, or electrical power exclusively for use at the facility. This emergency generator shall be operated only: 1. During the performance of normal testing and maintenance procedures, as recommended in writing by the manufacturer and/or as required in writing by a Federal or State law or regulation, 2. When there is power outage or the primary source of mechanical or thermal energy fails because of an emergency, or 3. When there is a voltage reduction issued by PJM and posted on the PJM internet website (www.pjm.com) under the "emergency procedures" menu. [N.J.A.C. 7:27-19.1]	Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(o)]	Other: The Permittee shall maintain on site and record in a logbook or computer data system, the following information: 1. For each time the emergency generator is specifically operated for testing or maintenance: i. The reason for its operation; ii. The date(s) of operation and the start up and shut down time; iii. The total operating time for testing or maintenance based on the generator's hour meter; and iv. The name of the operator; and 2. If a voltage reduction is the reason for the use of the emergency generator, a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction. [N.J.A.C. 7:27-19.11].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	This emergency generator shall not be used: 1. For normal testing and maintenance on days when the Department forecasts air quality anywhere in New Jersey to be "unhealthy for sensitive groups," "unhealthy," or "very unhealthy" as defined in the EPA's Air Quality Index at http://airnow.gov/, as supplemented or amended and incorporated herein by reference, unless required in writing by a Federal or State law or regulation. Procedures for determining the air quality forecasts for New Jersey are available at the Department's air quality permitting web site at http://www.state.nj.us/dep/aqpp/aqforecast; and 2. As a source of energy or power after the primary energy or power source has become operable again. If the primary energy or power source is under the control of the owner or operator of the emergency generator, the owner or operator shall make a reasonable, timely effort to repair the primary energy or power source. [N.J.A.C. 7:27-19.2(d)]	None.	None.	None.
8	The Permittee shall, once per month, record the total operating time from the generator's hour meter. [N.J.A.C. 7:27-19.11]	Monitored by hour/time monitor continuously . [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The Permittee shall maintain on site a record of the total operating time from the generator's hour meter. Once per month. . [N.J.A.C. 7:27-19.11]	None.
9	NOx (Total) <= 10.6 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	CO <= 5.8 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	VOC (Total) <= 0.64 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	TSP <= 0.33 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	PM-2.5 (Total) <= 0.33 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	PM-10 (Total) <= 0.33 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	Emergency generator fuel limited to ultra low sulfur distillate fuel oil (ULSD) [sulfur content <= 15 ppm]. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	Hours of Operation While Firing Diesel <= 500 hr/yr. [N.J.A.C. 7:27-22.16(a)]	Hours of Operation While Firing Diesel: Monitored by hour/time monitor continuously, based on a 12 calendar month period. [N.J.A.C. 7:27-22.16(o)]	Hours of Operation While Firing Diesel: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U4 Firewater Pump - 300 hp, ULSD fired**
Operating Scenario: **OS Summary**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 0.15 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	CO <= 0.13 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	VOC (Total) <= 0.06 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	TSP <= 0.0074 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	PM-2.5 (Total) <= 0.0074 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-10 (Total) <= 0.0074 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	The owner or operator of fire pump engines with a displacement of < 30 liters per cylinder must comply with the certification emission standards in 40 CFR part 89 and smoke standards in 40 CFR 89 for the same model year and maximum engine power as follows: NMHC + NOx <= " 3.0 " g/HP-hr, CO <= " 2.6" g/HP-hr, PM <= " 0.15" g/HP-hr. [40CFR60.4205(c)] [40 CFR 60.4210(a)]	None.	Other: The owner or operator of a 2007 model year or later engine must keep manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power.[40 CFR 60.4211].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U4 Firewater Pump - 300 hp, ULSD fired**
Operating Scenario: **OS1 EM Fire Pump - Normal Operation**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %. Smoke emissions from stationary internal combustion engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	Opacity: Monitored by visual determination at the approved frequency, based on an instantaneous determination. A certified smoke reader shall conduct visual observations once every 100 hours of ULSD operation using NJ Test Method 2. Monitoring and recordkeeping may occur at a lesser frequency if circumstances prohibit conducting a visual determination (e.g., nighttime operation, weather conditions, unplanned dispatching, etc.) within the 100-hour timeframe. However, in no case shall the interval between visual determinations exceed 125 hours of oil firing operation. If the visual observation occurs at a lesser frequency than every 100 hours of ULSD operation, the reason for monitoring at the lesser frequency shall also be recorded. [N.J.A.C. 7:27-22.16(o)]	Opacity: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. [N.J.A.C. 7:27-22.16(a)]	None.
2	Particulate Emissions <= 1.26 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Sulfur Content in Fuel <= 0.2 % by weight. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
4	Sulfur Content in Fuel <= 0.0015 % by weight. [N.J.A.C. 7:27-22.16(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
5	Maximum Gross Heat Input <= 2.1 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.
6	NOx (Total) <= 1.98 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 1.72 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	VOC (Total) <= 0.7 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	TSP <= 0.1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	PM-2.5 (Total) <= 0.1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	PM-10 (Total) <= 0.1 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	Emergency fire pump fuel limited to ultra low sulfur distillate fuel oil (ULSD) [sulfur content <= 15 ppm]. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	Hours of Operation While Firing Diesel <= 150 hr/yr. [N.J.A.C. 7:27-22.16(a)]	Hours of Operation While Firing Diesel: Monitored by hour/time monitor continuously, based on a 12 calendar month period. [N.J.A.C. 7:27-22.16(o)]	Hours of Operation While Firing Diesel: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U5 2 Million Gallon Fuel Oil Tank**
Operating Scenario: **OS Summary**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Sulfur Content in Fuel <= 0.2 % by weight. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
2	Sulfur Content in Fuel <= 0.0015 % by weight. [N.J.A.C. 7:27-22.16(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
3	Fuel Oil Usage <= 16.35 MMgal/yr. [N.J.A.C. 7:27-22.16(a)]	Fuel Oil Usage: Monitored by review of fuel delivery records once per bulk fuel shipment. [N.J.A.C. 7:27-22.16(o)]	Fuel Oil Usage: Recordkeeping by invoices / bills of lading Not Applicable. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U6 Auxiliary Boiler - 40 MMBtu/hr, natural gas fired**

Operating Scenario: **OS Summary**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Conduct a comprehensive stack test at emission point PT601 within 180 days from the date of initial operation of the boiler to demonstrate compliance with the NOx, CO and VOC emission limits while firing natural gas. The stack emission testing shall be conducted at worst-case operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]	Monitored by stack emission testing once initially. Unless otherwise approved in the stack test protocol or by the Department, each test run shall be 60 minutes in sampling duration. Compliance period shall be as specified in the monitoring requirement for each applicable emission limit. Stack tests shall be conducted for NOx, CO and VOC emissions, while combusting natural gas. . [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results once initially. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 within 60 days from the date of the initial operation of the turbines. Within 30 days of protocol approval, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. The stack test must be conducted within 180 days from the date of the initial operation of the boiler. N.J.A.C.7:27-22.19(d). The stack test report must be submitted to BTS within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. A copy of the test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit. The test results shall be reported in lb/hr, lb/MMBTU (HHV) and ppmvd @ 15% O2.[N.J.A.C. 7:27-22.18(e)], [N.J.A.C. 7:27-22.18(h)] and. [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	Conduct a comprehensive stack test at emission point PT601 at least 18 months prior to the expiration of the approved operating permit to demonstrate compliance with the NOx, CO and VOC emission limits while burning natural gas. The stack emission testing shall be conducted at worst-case operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]	Monitored by stack emission testing prior to permit renewal. Unless otherwise approved in the stack test protocol or by the Department, each test run shall be 60 minutes in sampling duration. Compliance period shall be as specified in the monitoring requirement for each applicable emission limit. Stack tests shall be conducted for NOx, CO and VOC, while combusting natural gas. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results prior to permit renewal. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 at least 30 months prior to the expiration of the approved operating permit. Within 30 days of protocol approval, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. A full stack test report must be submitted to BTS and a certified summary test report, as described in the protocol, must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. A copy of the certified summary test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit. The test results shall be reported in lb/hr, lb/MMBTU (HHV) and ppmvd @ 15% O2. [N.J.A.C. 7:27-22.18(e)], [N.J.A.C. 7:27-22.18(h)] and. [N.J.A.C. 7:27-22.16(o)]
3	VOC (Total) <= 50 ppmvd @ 7% O2. [N.J.A.C. 7:27-16.8(b)1]	VOC (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U6/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-16.23(a)2]	VOC (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U6/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U6/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]
4	CO <= 100 ppmvd @ 7% O2. [N.J.A.C. 7:27-16.8(b)2]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U6/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-16.23(a)2]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U6/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U6/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	Beginning in 2007, Adjust the combustion process in the same quarter of each calendar year, in accordance with N.J.A.C. 7:27-19.16. The adjustment may occur within 7 days of the first period of operation after the normal adjustment quarter if the boiler is not operated prior to that quarter. 1. Inspect the burner, and clean or replace any components of the burner as necessary. 2. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern consistent with the manufacturer's specifications. 3. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly 4. Minimize total emissions of NOx and CO consistent with the manufacturer's specifications. 5. Measure the concentrations in the effluent stream of NOx, CO and O2 in ppmvd, before and after the adjustment is made; and 6. Convert the emission values of the NOx, CO and O2 concentrations measured pursuant to (a)5 above to pounds per million BTU (lb/MMBtu) according to the following formula: lb/MMBtu = ppmvd x MW x F dry factor x O2 correction factor / 387,000,000 Where: ppmvd is the concentration in parts per million by volume, dry basis,of NOx or CO MW is the Molecular Weight for: NOx = 46 lb/lb-mole; CO = 28 lb/lb-mole F dry factor for: Natural gas = 8,710 dscf/MM BTU Residual or fuel oil = 9,190 dscf/MM BTU O2 correction factor: (20.9%) + (20.9% - O2 measured) [N.J.A.C. 7:27-16.8(c)(2)(ii)], & [N.J.A.C. 7:27-19.7(g)2]	Monitored by continuous emission monitoring system upon performing combustion adjustment Or Periodic Emission Monitoring. [N.J.A.C. 7:27-19.16(h)]	Recordkeeping by data acquisition system (DAS) / electronic data storage upon occurrence of event or manual logging of parameter. The owner or operator of the equipment or source operation adjusted pursuant to [N.J.A.C. 7:27-19.16(a)] shall ensure that each adjustment is recorded in a log book or computer data system and retained for a minimum of five years, to be made readily accessible to the Department upon request. Such record shall contain the following information for each adjustment: 1. The date of the adjustment and the times at which it began and ended; 2. The name, title and affiliation of the person who made the adjustment; 3. The NOx and CO concentrations in the effluent stream, in ppmvd, before and after each actual adjustment was made; 4. The concentration of O2 (in percent dry basis) at which the CO and NOx concentrations were measured pursuant to N.J.A.C. 7:27-19.16(a)5; 5. A description of any corrective action taken; 6. Results from any subsequent tests performed after taking any corrective action, including concentrations and converted emission values in pounds per million BTU (lb/MMBtu); 7. The type and amount of fuel used over the 12 months prior to the annual adjustment; an 8. Any other information which the Department or the EPA has required as a condition of approval of any permit or certificate issued for the equipment or source operation. . [N.J.A.C. 7:27-19.16(b)]	Other (provide description): Submit a report. Beginning in 2010, the owner or operator shall ensure that an annual combustion process adjustment report is submitted electronically to the Department (Regional Enforcement Office listed on the first page of the Operating Permit) within 45 days after the adjustment of the combustion process is completed in the format the Department specifies at its website. The report shall contain the following information: 1. The concentration of NOx and CO in the effluent stream in ppmvd, and O2, in percent dry basis, measured before and after the adjustment of the combustion process; 2. The converted emission values in lb/MMBTU for the measurements taken before and after the adjustment of the combustion process; 3. A description of any corrective action taken as part of the combustion adjustment; and 4. The type and amount of fuel used over the 12 months prior to the annual adjustment. [N.J.A.C. 7:27-19.16(c)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	The Permittee of the adjusted equipment or source operation shall ensure that the operating parameter settings are established and recorded after the combustion process is adjusted and that the adjusted equipment or source operation is maintained to operate consistent with the annual adjustment. [N.J.A.C. 7:27-19.16(e)]	Other: Monitor and maintain the operating parameter settings that are established after the combustion process is adjusted in order to operate consistent with the annual adjustment.[N.J.A.C. 7:27-22.16(o)].	Other: The owner or operator shall record the operating parameter settings that are established after the combustion process is adjusted.[N.J.A.C. 7:27-19.16(e)].	None.
7	An exceedance of an emission limit that occurs during an adjustment of the combustion process under N.J.A.C. 7:27-19.16(g) is not a violation of this subchapter if it occurs as a result of the adjustment. After the combustion adjustment has been completed, the maximum emission rate of any contaminant shall not exceed the maximum allowable emission rate applicable under this subchapter or under an operating permit issued pursuant to N.J.A.C. 7:27-22 or an applicable certificate issued pursuant to N.J.A.C. 7:27-8. [N.J.A.C. 7:27-19.16(f)]	None.	None.	None.
8	NOx (Total) <= 3.22 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	CO <= 3.31 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	VOC (Total) <= 0.46 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	TSP <= 0.46 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	PM-2.5 (Total) <= 0.46 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	PM-10 (Total) <= 0.46 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	Natural Gas Usage <= 180.4 MMft^3/yr. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis). The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.
15	The owner or operator shall record and maintain records of the amounts of each fuel combusted in the unit each operating day. [40 CFR 60.48c(g)(1)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system daily. [40 CFR 60.48c(g)(1)]	None.
16	The owner or operator shall maintain all required records for a period of two years following the date of such record. [40 CFR 60.48c(i)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: **U6 Auxiliary Boiler - 40 MMBtu/hr, natural gas fired**
Operating Scenario: **OS1 Aux Boiler 1 - Normal Operation**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity: No visible emissions. As specified in N.J.A.C. 7:27-3.2(c), this provision does not apply to smoke which is visible for a period of time of not longer than three (3) minutes in any consecutive 30-minute period. [N.J.A.C. 7:27- 3.2(a)]	None.	None.	None.
2	Particulate Emissions <= 10 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Maximum Gross Heat Input <= 40 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(a)]	None.
4	NOx (Total) <= 1.4 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U6/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U6/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U6/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]
5	CO <= 1.44 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U6/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U6/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U6/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]
6	VOC (Total) <= 0.2 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U6/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U6/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U6/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]
7	TSP <= 0.2 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	PM-2.5 (Total) <= 0.2 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	PM-10 (Total) <= 0.2 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Auxiliary boiler fuel limited to natural gas. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by invoices / bills of lading per delivery. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	Hours of Operation While Firing Natural Gas <= 4,600 hr/yr. [N.J.A.C. 7:27-22.16(a)]	Hours of Operation While Firing Natural Gas: Monitored by hour/time monitor continuously, based on a 12 calendar month period. [N.J.A.C. 7:27-22.16(o)]	Hours of Operation While Firing Natural Gas: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.

WEST DEPTFORD ENERGY LLC (56078)
BOP080001

Date: 5/6/2009

New Jersey Department of Environmental Protection
Facility Profile (General)

Facility Name (AIMS): West Deptford Energy Station

Facility ID (AIMS): 56078

Street Address: PARADISE RD
WEST DEPTFORD, NJ 08066

Mailing Address: TWO TOWER CTR
11TH FL
NEW BRUNSWICK, NJ 08816

State Plane Coordinates:

X-Coordinate:	289,719
Y-Coordinate:	366,966
Units:	Feet
Datum:	NAD83
Source Org.:	Other/Unknown
Source Type:	Survey frm Benchmark

County: Gloucester

Location Description: Paradise road off State Route 44

Industry:

Primary SIC:	4911
Secondary SIC:	
NAICS:	

WEST DEPTFORD ENERGY LLC (56078)
BOP080001

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: BOP - Operating Permits

Organization: NJDEP
Org. Type: State
Name: Yogesh Doshi
NJ EIN:
Title:
Phone: (609) 633-7249 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: yogesh.doshi@dep.state.nj.us
Mailing Address: 401 East State Street, 2 nd Floor
Trenton, NJ 08625

Contact Type: General Contact

Organization: West Deptford Energy, LLC
Org. Type: LLC
Name: Doug Mulvey
NJ EIN: 00205283747
Title: Environmental Engineer
Phone: (636) 532-2200 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: dmulvey@lspower.com
Mailing Address: 400 Chesterfield Center
Suite 110
St Louis, MO 63017

Contact Type: Responsible Official

Organization: West Deptford Energy, LLC
Org. Type: LLC
Name: Paul Thessen
NJ EIN: 00205283747
Title: Vice President
Phone: (636) 532-2200 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: pthessen@lspower.com
Mailing Address: 400 Chesterfield Center, Suite 110
St. Louis, MO 63017

WEST DEPTFORD ENERGY LLC (56078) Date: 05/06/2009
BOP080001

New Jersey Department of Environmental Protection
Non-Source Fugitive Emissions

FG NJID	Description of Activity Causing Emission	Location Description	Reasonable Estimate of Emissions (tpy)								
			VOC (Total)	NOx	CO	SO	TSP (Total)	PM-10	Pb	HAPS (Total)	Other (Total)
FG1	Particulate Emissions from Vehicle Traffic		0.000	0.000	0.000	0.000	0.020	0.004	0.000	0.00000000	
FG2	Fugitive Ammonia Emissions		0.000	0.000	0.000	0.000	0.000	0.000	0.000		1.100
FG3	Fugitive Natural Gas Emission		0.600	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	
Total			0.600	0.000	0.000	0.000	0.020	0.004	0.000	0.00000000	1.100

WEST DEPTFORD ENERGY LLC (56078)
BOP080001

Date: 5/6/2009

New Jersey Department of Environmental Protection
Insignificant Source Emissions

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1	Misc. Organic & Inorganic Liquid Chemical Storage < 0.02 psia vapor pressure and <10,000 gallons	Storage Vessel		1.000								
IS2	Fuel Oil Storage Tanks < 10,000 gallons	Storage Vessel		0.001								
IS3	45,000 gallon 19% Aqueous Ammonia Storage Tank	Storage Vessel										
IS4	Water Treat. Equip.(<2% solids inlet) w/ inlet conc. of total VOC & Group2 TXS <3500ppbw or total Group1/TXS <100ppbw &/or discharges <50 lb/hr sludge	Other Equipment		1.000								
Total				2.001	0.000	0.000	0.000	0.000	0.000	0.000	0.00000000	0.000

WEST DEPTFORD ENERGY LLC (56078) Date: 5/6/2009

BOP080001

New Jersey Department of Environmental Protection
Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand-Fathered	Last Mod. (Since 1968)	Equip. Set ID
E101	Unit No. 1	Combined Cycle Unit w/ Duct Burner No. 1	Combustion Turbine	NA	4/1/2010	No		
E102	Unit No. 2	Combined Cycle Unit w/ Duct Burner No. 2	Combustion Turbine	NA	4/1/2010	No		
E201	Tower No. 1	Multi Cell Cooling Tower No. 1	Other Equipment	NA	4/1/2010	No		
E202	Tower No. 2	Multi Cell Cooling Tower No. 2	Other Equipment	NA	4/1/2010	No		
E301	EM Gen No. 1	750 KW Diesel Emergency Generator No. 1	Emergency Generator	NA	4/1/2010	No		
E401	Fire Pump	300 hp Diesel Fire Water Pump	Emergency Generator	NA	4/1/2010	No		
E501	FO Tank	2 Million Gallon CTG Fuel Oil Storage Tank	Storage Vessel	NA	4/1/2010	No		
E601	Aux Boiler 1	40 MMBtu/hr (1800 hp) Auxiliary Boiler No. 1	Boiler	NA	4/1/2010	No		

56078 WEST DEPTFORD ENERGY LLC BOP080001 E101 (Combustion Turbine)
Print Date: 5/6/2009

Make:	TBD		
Manufacturer:	TBD		
Model:	TBD		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	2,706.00		
Type of Turbine:	Industrial		
Type of Cycle:	Combined-Cycle	Description:	
Industrial Application:	Electical Generator	Description:	
Power Output:	373.00	Units:	Megawatts

Is the combustion turbine using (check all that apply):

A Dry Low NOx Combustor:	☑		
Steam Injection:	☐	Steam to Fuel Ratio:	
Water Injection:	☑	Water to Fuel Ratio:	
Other:	☑	Description:	Catalyst & SCR

Is the turbine Equipped with a Duct Burner? ● Yes ○ No

Have you attached a diagram showing the location and/or the configuration of this equipment? ● Yes ○ No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? ○ Yes ● No

Comments: Maximum gross heat input for gas fired operation (with duct burner) is 2,706 MMBtu/hr and 2,270 MMBtu/hr for oil fired operations without duct burner. Maximum MW is 373 per power block at 0 deg F.

56078 WEST DEPTFORD ENERGY LLC BOP080001 E401 (Emergency Generator)
Print Date: 5/6/2009

Make:	TBD
Manufacturer:	TBD
Model:	TBD
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	2.10
Will the equipment be used in excess of 500 hours per year?	○ Yes ● No
Have you attached a diagram showing the location and/or the configuration of this equipment?	● Yes ○ No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	○ Yes ● No

Comments:

56078 WEST DEPTFORD ENERGY LLC BOP080001 E102 (Combustion Turbine)
Print Date: 5/6/2009

Make:	TBD		
Manufacturer:	TBD		
Model:	TBD		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	2,706.00		
Type of Turbine:	Industrial		
Type of Cycle:	Combined-Cycle	Description:	
Industrial Application:	Electical Generator	Description:	
Power Output:	373.00	Units:	Megawatts

Is the combustion turbine using (check all that apply):

A Dry Low NOx Combustor:	☑		
Steam Injection:	☐	Steam to Fuel Ratio:	
Water Injection:	☑	Water to Fuel Ratio:	
Other:	☑	Description:	Catalyst & SCR

Is the turbine Equipped with a Duct Burner? ● Yes ○ No

Have you attached a diagram showing the location and/or the configuration of this equipment? ● Yes ○ No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? ○ Yes ● No

Comments: Maximum gross heat input for gas fired operation (with duct burner) is 2,706 MMBtu/hr and 2,270 MMBtu/hr for oil fired operations without duct burner. Maximum MW is 373 per power block at 0 deg F.

56078 WEST DEPTFORD ENERGY LLC BOP080001 E201 (Other Equipment)
Print Date: 5/6/2009

Make:	TBD
Manufacturer:	TBD
Model:	TBD
Equipment Type:	Wet mechanical draft cooling tower (multi-cell) with drift eliminators
Capacity:	85,000.00
Units:	gal/min
Description:	

Have you attached a diagram showing the location and/or the configuration of this equipment?

- (●) Yes
- ( ) No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

- ( ) Yes
- (●) No

Comments:

56078 WEST DEPTFORD ENERGY LLC BOP080001 E202 (Other Equipment)
Print Date: 5/6/2009

Make:	TBD
Manufacturer:	TBD
Model:	TBD
Equipment Type:	Wet mechanical draft cooling tower (multi-cell) with drift eliminators
Capacity:	85,000.00
Units:	gal/min
Description:	

Have you attached a diagram showing the location and/or the configuration of this equipment?

- (●) Yes
- ( ) No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

- ( ) Yes
- (●) No

Comments:

56078 WEST DEPTFORD ENERGY LLC BOP080001 E301 (Emergency Generator)
Print Date: 5/6/2009

Make:	TBD
Manufacturer:	TBD
Model:	TBD
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	7.00
Will the equipment be used in excess of 500 hours per year?	○ Yes ● No
Have you attached a diagram showing the location and/or the configuration of this equipment?	● Yes ○ No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	○ Yes ● No

Comments:

56078 WEST DEPTFORD ENERGY LLC BOP080001 E501 (Storage Vessel)
Print Date: 5/6/2009

What type of contents is this storage vessel equipped to contain by design?	Liquids Only
Storage Vessel Type:	Tank
Design Capacity:	2,000,000
Units:	gallons
Ground Location:	
Is the Shell of the Equipment Exposed to Sunlight?	Yes
Shell Color:	White
Description (if other):	
Shell Condition:	
Paint Condition:	Good
Shell Construction:	
Is the Shell Insulated?	
Type of Insulation:	
Insulation Thickess (in):	
Thermal Conductivity of Insulation [(BTU)(in)(hr)(ft2)(deg F)]:	
Shape of Storage Vessel:	
Shell Height (From Ground to Roof Bottom) (ft):	50.00
Length (ft):	
Width (ft):	
Diameter (ft):	85.00
Other Dimension	
Description:	
Value:	
Units:	
Fill Method:	Submerged
Description (if other):	
Maximum Design Fill Rate:	6.30
Units:	gal/min
Does the storage vessel have a roof or an open top?	Roof
Roof Type:	Vertical fixed roof tank
Roof Height (From Roof Bottom to Roof Top) (ft):	50.00
Roof Construction:	
Primary Seal Type:	
Secondary Seal Type:	
Total Number of Seals:	
Roof Support:	
Does the storage vessel have a Vapor Return Loop?	No
Does the storage vessel have a Conservation Vent?	Yes
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? No

Comments:

56078 WEST DEPTFORD ENERGY LLC BOP080001 E601 (Boiler)
Print Date: 5/6/2009

Make:	TBD
Manufacturer:	TBD
Model:	TBD
Maximum Rated Gross Heat Input (MMBtu/hr - HHV):	40.00
Boiler Type:	
Utility Type:	
Output Type:	
Steam Output (lb/hr):	
Fuel Firing Method:	
Description (if other):	
Draft Type:	
Heat Exchange Type:	

Is the boiler using? (check all that apply):

Low NOx Burner:	☑ Type:	
Staged Air Combustion:	☐	
Flue Gas Recirculation (FGR):	☐ Amount (%):	

Have you attached a diagram showing the location and/or the configuration of this equipment? Yes

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application? No

Comments:

WEST DEPTFORD ENERGY LLC (56078) Date: 5/6/2009

BOP080001

New Jersey Department of Environmental Protection
Control Device Inventory

CD NJID	Facility's Designation	Description	CD Type	Install Date	Grand-Fathered	Last Mod. (Since 1968)	CD Set ID
CD101	CO Catalyst	CO Catalyst Unit No. 1	Other	4/1/2010	No		
CD102	SCR Unit No.	SCR Unit No. 1	Selective Catalytic Reduction	4/1/2010	No		
CD103	CO Catalyst	CO Catalyst Unit No. 2	Other	4/1/2010	No		
CD104	SCR Unit No.	SCR Unit No. 2	Selective Catalytic Reduction	4/1/2010	No		
CD201	Drift Elimin	Drift Eliminator No. 1	Other	4/1/2010	No		
CD202	Drift Elimin	Drift Eliminator No. 2	Other	4/1/2010	No		

56078 WEST DEPTFORD ENERGY LLC BOP080001 CD101 (Other)
Print Date: 5/6/2009

Make:	TBD
Manufacturer:	TBD
Model:	TBD
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (F):	
Minimum Temperature of Vapor Stream to Control Device (F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	None
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	

56078 WEST DEPTFORD ENERGY LLC BOP080001 CD102 (Selective Catalytic Reduction)
Print Date: 5/6/2009

Make:	TBD
Manufacturer:	TBD
Model:	TBD
Minimum Temperature at Catalyst Bed (℉):	
Maximum Temperature at Catalyst Bed (℉):	
Minimum Temperature at Reagent Injection Point (℉):	
Maximum Temperature at Reagent Injection Point (℉):	
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	19% Aqueous NH3
Minimum Reagent Charge Rate (gpm):	
Maximum Reagent Charge Rate (gpm):	
Minimum Concentration of Reagent in Solution (% Volume):	
Minimum NOx to Reagent Mole Ratio:	
Maximum NOx to Reagent Mole Ratio:	
Maximum Anticipated Ammonia Slip (ppm):	5
Type of Catalyst:	TBD
Volume of Catalyst (ft^3):	
Form of Catalyst:	TBD
Anticipated Life of Catalyst:	
Units:	
Have you attached a catalyst replacement schedule?	○ Yes ● No
Method of Determining Breakthrough:	TBD
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	None
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No

Comments:

56078 WEST DEPTFORD ENERGY LLC BOP080001 CD102 (Selective Catalytic Reduction)
Print Date: 5/6/2009

56078 WEST DEPTFORD ENERGY LLC BOP080001 CD103 (Other)
Print Date: 5/6/2009

Make:	TBD
Manufacturer:	TBD
Model:	TBD
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (F):	
Minimum Temperature of Vapor Stream to Control Device (F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	None
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	

56078 WEST DEPTFORD ENERGY LLC BOP080001 CD104 (Selective Catalytic Reduction)
Print Date: 5/6/2009

Make:	TBD
Manufacturer:	TBD
Model:	TBD
Minimum Temperature at Catalyst Bed (℉):	
Maximum Temperature at Catalyst Bed (℉):	
Minimum Temperature at Reagent Injection Point (℉):	
Maximum Temperature at Reagent Injection Point (℉):	
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH3
Minimum Reagent Charge Rate (gpm):	
Maximum Reagent Charge Rate (gpm):	
Minimum Concentration of Reagent in Solution (% Volume):	
Minimum NOx to Reagent Mole Ratio:	
Maximum NOx to Reagent Mole Ratio:	
Maximum Anticipated Ammonia Slip (ppm):	5
Type of Catalyst:	TBD
Volume of Catalyst (ft³):	
Form of Catalyst:	TBD
Anticipated Life of Catalyst:	
Units:	
Have you attached a catalyst replacement schedule?	○ Yes ● No
Method of Determining Breakthrough:	TBD
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	None
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No

Comments:

56078 WEST DEPTFORD ENERGY LLC BOP080001 CD104 (Selective Catalytic Reduction)
Print Date: 5/6/2009

56078 WEST DEPTFORD ENERGY LLC BOP080001 CD201 (Other)
Print Date: 5/6/2009

Make:	TBD
Manufacturer:	TBD
Model:	TBD
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (F):	
Minimum Temperature of Vapor Stream to Control Device (F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	Drift Eliminator with a drift rate of 0.0005%

56078 WEST DEPTFORD ENERGY LLC BOP080001 CD202 (Other)
Print Date: 5/6/2009

Make:	TBD
Manufacturer:	TBD
Model:	TBD
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (F):	
Minimum Temperature of Vapor Stream to Control Device (F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	○ Yes ● No
Comments:	Drift Eliminator with a drift rate of 0.0005%

WEST DEPTFORD ENERGY LLC (56078)
BOP080001

Date: 5/6/2009

New Jersey Department of Environmental Protection
Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam. (in.)	Height (ft.)	Dist. to Prop. Line (ft)	Exhaust Temp. (deg. F)			Exhaust Vol. (acfm)			Discharge Direction	PT Set ID
							Avg.	Min.	Max.	Avg.	Min.	Max.		
PT101	PT101	Combined Cycle Unit No. 1	Round	216	210	434	175.0	150.0	290.0	1,060,000.0	665,540.0	1,451,000.0	Up	
PT102	PT102	Combined Cycle Unit No. 2	Round	216	210	540	175.0	150.0	290.0	1,060,000.0	665,540.0	1,451,000.0	Up	
PT201	PT201	Cooling Tower No. 1	Round	420	47	213	78.0	61.6	92.5	5,250,000.0	4,725,000.0	5,775,000.0	Up	
PT202	PT202	Cooling Tower No. 2	Round	420	47	353	78.0	61.6	92.5	5,250,000.0	4,725,000.0	5,775,000.0	Up	
PT301	PT301	Emergency Generator No. 1	Round	12	16	528	1,000.0	900.0	1,100.0	5,100.0	4,500.0	5,700.0	Up	
PT401	PT401	Stack for Diesel Fired Water Pump	Round	12	15	474	1,000.0	900.0	1,100.0	1,698.0	1,500.0	1,900.0	Up	
PT501	PT501	Fuel Oil Storage Tank	Round	999	50	358	70.0	10.0	100.0	0.8	0.8	0.9	Up	
PT601	PT601	Auxiliary Boiler No. 1	Round	24	125	501	670.0	600.0	750.0	16,500.0	14,800.0	18,200.0	Up	

WEST DEPTFORD ENERGY LLC (56078)
BOP080001

Date: 5/6/2009

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 1 CC Turbine Combined Cycle Turbines - 600 MW, natural gas / ULSD fired

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	CT1 - NG	Turbine 1 (with or without duct burner) - NG	Normal - Steady State	E101	CD101 (P)	PT101		0.0	7,800.0	589,100.0	1,243,100.0		162.0	199.0
OS2	CT1 - ULSD	Turbine 1 - ULSD	Normal - Steady State	E101	CD102 (S)	PT101		0.0	500.0	589,100.0	1,243,100.0		162.0	199.0
OS3	CT1 - SU/SD	Turbine 1 - Start-up/Shutdown	Startup	E101		PT101		0.0	900.0	589,100.0	1,243,100.0		162.0	199.0
OS5	CT2 - NG	Turbine 2 (with or without duct burner) - NG	Normal - Steady State	E102	CD103 (P)	PT102		0.0	7,800.0	589,100.0	1,243,100.0		162.0	199.0
OS6	CT2 - ULSD	Turbine 2 - ULSD	Normal - Steady State	E102	CD104 (S)	PT102		0.0	500.0	589,100.0	1,243,100.0		162.0	199.0
OS7	CT2 - SU/SD	Turbine 2 - Start-up/Shutdown	Startup	E102		PT102		0.0	900.0	589,100.0	1,243,100.0		162.0	199.0

U 2 CoolTowrs Cooling Towers (multicell)

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	Tower 1	Cooling Tower 1 - Normal Operation	Normal - Steady State	E201	CD201 (P)	PT201		0.0	8,760.0	4,725,000.0	5,775,000.0		61.6	92.5
OS2	Tower 2	Cooling Tower 2 - Normal Operation	Normal - Steady State	E202	CD202 (P)	PT202		0.0	8,760.0	4,725,000.0	5,775,000.0		61.6	92.5

WEST DEPTFORD ENERGY LLC (56078)
BOP080001

Date: 5/6/2009

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 3 EM Gen Emergency Generator - 750 kW, ULSD fired

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	EM Gen 1	EM Gen 1 - Normal Operation	Normal - Steady State	E301		PT301		0.0	500.0		4,500.0	5,700.0	900.0	1,100.0

U 4 FW Pump Firewater Pump - 300 hp, ULSD fired

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	Fire Pump	EM Fire Pump - Normal Operation	Normal - Steady State	E401		PT401		0.0	150.0		1,500.0	1,900.0	900.0	1,100.0

WEST DEPTFORD ENERGY LLC (56078)
BOP080001

Date: 5/6/2009

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 5 FO Tank 2 Million Gallon Fuel Oil Tank

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	FO Tank	FO Tank - Normal Operation	Normal - Steady State	E501		PT501		0.0	8,760.0		0.8	0.9	10.0	100.0

U 6 Aux Blr Auxiliary Boiler - 40 MMBtu/hr, natural gas fired

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	Aux Boiler1	Aux Boiler 1 - Normal Operation	Normal - Steady State	E601		PT601		0.0	4,600.0		14,800.0	18,200.0	600.0	750.0

Date: 5/6/2009

New Jersey Department of Environmental Protection
Subject Item Group Inventory

Group NJID: GR1 Facility Ems

Members:

Type	ID	OS	Step
U	U 1	OS0 Summary	
U	U 2	OS0 Summary	
U	U 3	OS0 Summary	
U	U 4	OS0 Summary	
U	U 6	OS0 Summary	

Formal Reason(s) for Group/Cap:

☑ Other

Other (explain): This Group is for Facility Total Annual Emissions from all Equipment

Condition/Requirements that will be complied with or are no longer applicable as a result of this Group:

Operating Circumstances:

WEST DEPTFORD ENERGY LLC (56078)
BOP080001

Date: 5/6/2009

New Jersey Department of Environmental Protection
Reason for Application

Permit Being Modified

Permit Class: **Number:** 0

Description of Modifications: West Deptford Energy, LLC (WDE) submitted a combined Prevention of Significant Deterioration (PSD) permit, a Title V Operating Permit, and Acid Rain permit in March, 2008, to construct and operate the West Deptford Energy Station (WDES or Facility), a nominal 600 megawatt (MW), maximum 616 MW (summer operating conditions), combined-cycle power generating facility situated on an approximately 302 acre site in the township of West Deptford, NJ. The actual facility footprint would occupy approximately 35 acres.

The WDES facility will be a major stationary source consisting of two combined cycle combustion turbine generators, two duct-fired heat recovery steam generators (HRSG), two steam turbine electric generators, two 5-cell wet mechanical cooling towers, and ancillary equipment which include a 40 MMBtu/hr auxiliary boiler that will operate on natural gas for maximum 4,600 hours/yr, a 750 KW (7.0 MMBtu/hr HHV) emergency diesel engine-driven generator, and a 300 HP (2.1 MMBtu/hr HHV) diesel engine-driven fire pump, and storage tanks. The emergency diesel-fired generator and fire pump will use ultra low sulfur diesel (ULSD) fuel oil.

56078 WEST DEPTFORD ENERGY LLC Date: 5/6/2009

BOP080001

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **FC**

Operating Scenario:

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Acrolein			0.12680000	0.12680000	tons/yr	No
Arsenic compounds			0.12700000	0.12700000	tons/yr	No
CO			704.45000000	704.45000000	tons/yr	No
Formaldehyde			4.87000000	4.87000000	tons/yr	No
HAPs (Total)			5.94700000	5.94700000	tons/yr	No
Manganese compounds			0.89720000	0.89720000	tons/yr	No
NOx (Total)			303.18000000	303.18000000	tons/yr	No
PM-10 (Total)			99.33000000	99.33000000	tons/yr	No
Pb			0.01660000	0.01660000	tons/yr	No
SO2			35.38000000	35.38000000	tons/yr	No
Selenium compounds			0.02840000	0.02840000	tons/yr	No
TSP			55.17000000	55.17000000	tons/yr	No
VOC (Total)			94.69000000	94.69000000	tons/yr	No

Subject Item: **GR1 Facility Ems**

Operating Scenario:

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			704.45000000	704.45000000	tons/yr	
NOx (Total)			303.18000000	303.18000000	tons/yr	
PM-10 (Total)			99.33000000	99.33000000	tons/yr	

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **GR1 Facility Ems**

Operating Scenario:

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-2.5 (Total)			96.13000000	96.13000000	tons/yr	
TSP			55.17000000	55.17000000	tons/yr	
VOC (Total)			94.69000000	94.69000000	tons/yr	

Subject Item: **U1 CC Turbine**

Operating Scenario: **OS0 Summary**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Butadiene (1,3-)			0.05240000	0.05240000	tons/yr	No
Acrolein			0.25400000	0.25400000	tons/yr	No
Arsenic compounds			0.02640000	0.02640000	tons/yr	No
CO			698.27000000	698.27000000	tons/yr	No
Formaldehyde			28.30000000	28.30000000	tons/yr	No
HAPs (Total)			57.60000000	57.60000000	tons/yr	No
Hexane (n-)			13.70000000	13.70000000	tons/yr	No
Manganese compounds			1.80000000	1.80000000	tons/yr	No
Mercury compounds			0.00459000	0.00459000	tons/yr	No
NOx (Total)			297.17000000	297.17000000	tons/yr	No
PM-10 (Total)			93.60000000	93.60000000	tons/yr	No
PM-2.5 (Total)			93.60000000	93.60000000	tons/yr	
Pb			0.01700000	0.01700000	tons/yr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U1 CC Turbine**

Operating Scenario: **OS0 Summary**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
SO2			35.32000000	35.32000000	tons/yr	No
Selenium compounds			0.05690000	0.05690000	tons/yr	No
TSP			50.02000000	50.02000000	tons/yr	No
Toluene			5.18000000	5.18000000	tons/yr	No
VOC (Total)			94.02000000	94.02000000	tons/yr	No

Subject Item: **U1 CC Turbine**

Operating Scenario: **OS1 CT1 - NG**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Acrolein			0.01420000	0.01420000	lb/hr	No
Ammonia			5.00000000	5.00000000	ppmvd @ 15% O2	
CO			2.00000000	2.00000000	ppmvd @ 15% O2	
CO			13.95000000	13.95000000	lb/hr	No
CO			0.01000000	0.01000000	lb/MMBTU	
Formaldehyde			1.61000000	1.61000000	lb/hr	No
HAPs (Total)			2.90000000	2.90000000	lb/hr	No
Hexane (n-)			1.01000000	1.01000000	lb/hr	No
Lead compounds			0.00030000	0.00030000	lb/hr	
NOx (Total)			2.00000000	2.00000000	ppmvd @ 15% O2	
NOx (Total)			0.01000000	0.01000000	lb/MMBTU	

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U1 CC Turbine**

Operating Scenario: **OS1 CT1 - NG**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
NOx (Total)			22.91000000	22.91000000	lb/hr	No
PM-10 (Total)			18.66000000	18.66000000	lb/hr	No
PM-2.5 (Total)			18.66000000	18.66000000	lb/hr	
Pb			0.00030000	0.00030000	lb/hr	No
SO2			5.66000000	5.66000000	lb/hr	No
TSP			10.44000000	10.44000000	lb/hr	No
Toluene			0.29600000	0.29600000	lb/hr	No
VOC (Total)			6.45000000	6.45000000	lb/hr	No

Subject Item: **U1 CC Turbine**

Operating Scenario: **OS2 CT1 - ULSD**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Butadiene (1,3-)			0.03480000	0.03500000	lb/hr	No
Arsenic compounds			0.02400000	0.02400000	lb/hr	No
Benzene			0.12000000	0.12000000	lb/hr	No
Beryllium compounds			0.00067300	0.00067300	lb/hr	No
CO			3.00000000	3.00000000	ppmvd @ 15% O2	
CO			18.03000000	18.03000000	lb/hr	No
Formaldehyde			0.61000000	0.61000000	lb/hr	No
HAPs (Total)			2.60000000	2.60000000	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U1 CC Turbine**

Operating Scenario: **OS2 CT1 - ULSD**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Manganese compounds			1.72000000	1.72000000	lb/hr	No
Mercury compounds			0.00261000	0.00261000	lb/hr	No
NOx (Total)			3.50000000	3.50000000	ppmvd @ 15% O2	
NOx (Total)			34.55000000	34.55000000	lb/hr	No
Nickel compounds			0.01000000	0.01000000	lb/hr	No
PM-10 (Total)			34.00000000	34.00000000	lb/hr	No
PM-2.5 (Total)			34.00000000	34.00000000	lb/hr	
Pb			0.03000000	0.03000000	lb/hr	No
SO2			4.64000000	4.64000000	lb/hr	No
Selenium compounds			0.05430000	0.05430000	lb/hr	No
TSP			17.00000000	17.00000000	lb/hr	No
VOC (Total)			4.00000000	4.00000000	ppmvd @ 15% O2	
VOC (Total)			13.77000000	13.77000000	lb/hr	No

Subject Item: **U1 CC Turbine**

Operating Scenario: **OS3 CT1 - SU/SD**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			250.00000000	250.00000000	ppmvd @ 15% O2	No
NOx (Total)					lb/hr	No
NOx (Total)			0.15000000	0.15000000	lb/MMBTU	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U1 CC Turbine**

Operating Scenario: **OS3 CT1 - SU/SD**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Nitrogen oxides (NOx)			0.35000000	0.35000000	lb/MMBTU	
VOC (Total)			50.00000000	50.00000000	ppmvd @ 15% O2	No

Subject Item: **U1 CC Turbine**

Operating Scenario: **OS5 CT2 - NG**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Acrolein			0.01420000	0.01420000	lb/hr	No
Ammonia			5.00000000	5.00000000	ppmvd @ 15% O2	
CO			2.00000000	2.00000000	ppmvd @ 15% O2	
CO			0.01000000	0.01000000	lb/MMBTU	
CO			13.95000000	13.95000000	lb/hr	No
Formaldehyde			1.61000000	1.61000000	lb/hr	No
HAPs (Total)			2.90000000	2.90000000	lb/hr	No
Hexane (n-)			1.01000000	1.01000000	lb/hr	No
Lead compounds			0.00030000	0.00030000	lb/hr	
NOx (Total)			2.00000000	2.00000000	ppmvd @ 15% O2	
NOx (Total)			22.91000000	22.91000000	lb/hr	No
NOx (Total)			0.01000000	0.01000000	lb/MMBTU	
PM-10 (Total)			18.66000000	18.66000000	lb/hr	No
PM-2.5 (Total)			18.66000000	18.66000000	lb/hr	

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U1 CC Turbine**

Operating Scenario: **OS5 CT2 - NG**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Pb			0.00030000	0.00030000	lb/hr	No
SO2			5.66000000	5.66000000	lb/hr	No
TSP			10.44000000	10.44000000	lb/hr	No
Toluene			0.29600000	0.29600000	lb/hr	No
VOC (Total)			6.45000000	6.45000000	lb/hr	No

Subject Item: **U1 CC Turbine**

Operating Scenario: **OS6 CT2 - ULSD**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Butadiene (1,3-)			0.03480000	0.03500000	lb/hr	No
Arsenic compounds			0.02400000	0.02400000	lb/hr	No
Benzene			0.12000000	0.12000000	lb/hr	No
Beryllium compounds			0.00067300	0.00067300	lb/hr	No
CO			3.00000000	3.00000000	ppmvd @ 15% O2	
CO			18.03000000	18.03000000	lb/hr	No
Formaldehyde			0.61000000	0.61000000	lb/hr	No
HAPs (Total)			2.60000000	2.60000000	lb/hr	No
Manganese compounds			1.72000000	1.72000000	lb/hr	No
Mercury compounds			0.00261000	0.00261000	lb/hr	No
NOx (Total)			3.50000000	3.50000000	ppmvd @ 15% O2	

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U1 CC Turbine**

Operating Scenario: **OS6 CT2 - ULSD**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
NOx (Total)			34.55000000	34.55000000	lb/hr	No
Nickel compounds			0.01000000	0.01000000	lb/hr	No
PM-10 (Total)			34.00000000	34.00000000	lb/hr	No
PM-2.5 (Total)			34.00000000	34.00000000	lb/hr	
Pb			0.03000000	0.03000000	lb/hr	No
SO2			4.64000000	4.64000000	lb/hr	No
Selenium compounds			0.05430000	0.05430000	lb/hr	No
TSP			17.00000000	17.00000000	lb/hr	No
VOC (Total)			4.00000000	4.00000000	ppmvd @ 15% O2	
VOC (Total)			13.77000000	13.77000000	lb/hr	No

Subject Item: **U1 CC Turbine**

Operating Scenario: **OS7 CT2 - SU/SD**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			250.00000000	250.00000000	ppmvd @ 15% O2	No
CO					lb/hr	No
HAPs (Total)					lb/hr	No
NOx (Total)					lb/hr	No
NOx (Total)			0.15000000	0.15000000	lb/MMBTU	No
Nitrogen oxides (NOx)			0.35000000	0.35000000	lb/MMBTU	

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U1 CC Turbine**

Operating Scenario: **OS7 CT2 - SU/SD**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)					lb/hr	No
Pb					lb/hr	No
SO2					lb/hr	No
TSP					lb/hr	No
VOC (Total)			50.00000000	50.00000000	ppmvd @ 15% O2	No
VOC (Total)					lb/hr	No

Subject Item: **U2 CoolTowrs**

Operating Scenario: **OS0 Summary**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)			5.18000000	5.18000000	tons/yr	No
PM-2.5 (Total)			1.97000000	1.97000000	tons/yr	
TSP			7.83000000	7.83000000	tons/yr	No

Subject Item: **U2 CoolTowrs**

Operating Scenario: **OS1 Tower 1**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)			0.59000000	0.59000000	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U2 CoolTowrs**

Operating Scenario: **OS1 Tower 1**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-2.5 (Total)			0.22000000	0.22000000	lb/hr	
TSP			0.89000000	0.89000000	lb/hr	No

Subject Item: **U2 CoolTowrs**

Operating Scenario: **OS2 Tower 2**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO					lb/hr	No
HAPs (Total)					lb/hr	No
NOx (Total)					lb/hr	No
PM-10 (Total)			0.59000000	0.59000000	lb/hr	No
PM-2.5 (Total)			0.22000000	0.22000000	lb/hr	
Pb					lb/hr	No
SO2					lb/hr	No
TSP			0.89000000	0.89000000	lb/hr	No
VOC (Total)					lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U3 EM Gen**

Operating Scenario: **OS0 Summary**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			1.45000000	1.45000000	tons/yr	No
NOx (Total)			2.65000000	2.65000000	tons/yr	No
PM-10 (Total)			0.08000000	0.08000000	tons/yr	No
PM-2.5 (Total)			0.08000000	0.08000000	tons/yr	
SO2			D	D	tons/yr	No
TSP			0.08000000	0.08000000	tons/yr	No
VOC (Total)			0.16000000	0.16000000	tons/yr	No

Subject Item: **U3 EM Gen**

Operating Scenario: **OS1 EM Gen 1**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			5.80000000	5.80000000	lb/hr	No
NOx (Total)			9.96000000	9.96000000	lb/hr	No
PM-10 (Total)			0.33000000	0.33000000	lb/hr	No
PM-2.5 (Total)			0.33000000	0.33000000	lb/hr	
SO2			D	D	lb/hr	No
TSP			0.33000000	0.33000000	lb/hr	No
VOC (Total)			0.64000000	0.64000000	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U4 FW Pump**

Operating Scenario: **OS0 Summary**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			0.13000000	0.13000000	tons/yr	No
NOx (Total)			0.09000000	0.09000000	tons/yr	No
PM-10 (Total)			0.00740000	0.00740000	tons/yr	No
PM-2.5 (Total)			0.00740000	0.00740000	tons/yr	
SO2			D	D	tons/yr	No
TSP			0.00740000	0.00740000	tons/yr	No
VOC (Total)			0.06000000	0.06000000	tons/yr	No

Subject Item: **U4 FW Pump**

Operating Scenario: **OS1 Fire Pump**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			1.72000000	1.72000000	lb/hr	No
NOx (Total)			1.28000000	1.28000000	lb/hr	No
PM-10 (Total)			0.10000000	0.10000000	lb/hr	No
PM-2.5 (Total)			0.10000000	0.10000000	lb/hr	
SO2			D	D	lb/hr	No
TSP			0.10000000	0.10000000	lb/hr	No
VOC (Total)			0.70000000	0.70000000	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U5 FO Tank**

Operating Scenario: **OS0 Summary**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO					tons/yr	No
VOC (Total)			D	D	tons/yr	No

Subject Item: **U5 FO Tank**

Operating Scenario: **OS1 FO Tank**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)			D	D	lb/hr	No

Subject Item: **U6 Aux Blr**

Operating Scenario: **OS0 Summary**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			4.60000000	4.60000000	tons/yr	No
NOx (Total)			3.22000000	3.22000000	tons/yr	No
PM-10 (Total)			0.46000000	0.46000000	tons/yr	No
PM-2.5 (Total)			0.46000000	0.46000000	tons/yr	
SO2			D	D	tons/yr	No
TSP			0.46000000	0.46000000	tons/yr	No
VOC (Total)			0.46000000	0.46000000	tons/yr	No

56078 WEST DEPTFORD ENERGY LLC Date: 5/6/2009

BOP080001

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U6 Aux Blr**

Operating Scenario: **OS1 Aux Boiler1**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
CO			2.00000000	2.00000000	lb/hr	No
HAPs (Total)					lb/hr	No
NOx (Total)			1.40000000	1.40000000	lb/hr	No
PM-10 (Total)			0.20000000	0.20000000	lb/hr	No
PM-2.5 (Total)			0.20000000	0.20000000	lb/hr	
Pb					lb/hr	No
SO2			D	D	lb/hr	No
TSP			0.20000000	0.20000000	lb/hr	No
VOC (Total)			0.20000000	0.20000000	lb/hr	No

State of New Jersey

Jon S. Corzine
Governor

DEPARTMENT of ENVIRONMENTAL PROTECTION

Mark N. Mauriello
Acting Commissioner

Division of Air Quality
Bureau of Operating Permits
401 E. State Street, 2nd floor, P.O. Box 27
Trenton, NJ 08625-0027

PHASE II ACID RAIN PERMIT

Issued to: West Deptford Energy Station
Paradise Road, West Deptford Township
New Jersey 08086

Owned by: LS Power Development, LLC
400 Chesterfield Center - Ste 110
St Louis, MO 63017

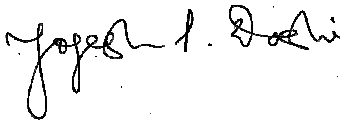
Operated by: West Deptford Energy LLC
400 Chesterfield Center - Ste 110
St Louis, MO 63017

ORIS Code: 56963

Effective: May 6, 2009

This Acid Rain Permit is issued under the authority of Chapter 106, P.L.1967 (N.J.S.A. 26:2C-9.2) and Titles IV and V of the Clean Air Act. The owners and operators of each affected unit at this facility shall comply with all of the requirements established in this permit.

Approved by:



John Preczewski
Chief, Bureau of Operating Permits

ACID RAIN PERMIT CONTENTS

1) STATEMENT OF BASIS

2) UNIT SPECIFIC REQUIREMENTS

3) COMMENTS, NOTES, AND JUSTIFICATIONS REGARDING PERMIT DECISIONS

4) PHASE II PERMIT APPLICATION

1) Statement of Basis

In accordance with N.J.S.A. 26:2C-9.2 and Titles IV and V of the Clean Air Act, the Department issues this permit pursuant to N.J.A.C. 7:27 et seq.

2) Unit Specific Requirements

Refer to 40 CFR 72 for specific requirements.

3) Comments, Notes, And Justifications Regarding Permit Decisions

This facility is subject to the Operating Permit regulations promulgated at N.J.A.C. 7:27-22. Therefore, the facility must obtain an Operating Permit. The Department is currently reviewing the Operating Permit application filed by the applicant, and expects to issue a permit decision on their application in the near future. The procedures for incorporating this Acid Rain permit into the Operating Permit shall be consistent with the state requirements at N.J.A.C. 7:27-22.29, the federal requirements at 40 CFR 72, and any official guidance issued by USEPA.

4) Phase II Permit Application

The owners and operators shall comply with all of the standard requirements and special provisions set forth on the attached Phase II Permit Application for each affected unit.

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ new ☒ revised ☐ for Acid Rain permit renewal

STEP 1

Identify the facility name, State, and plant (ORIS) code.

Facility (Source) Name	State	Plant Code
West Deptford Energy Station	NJ	56963

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
E101	Yes
E102	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

Permit Requirements

STEP 3

Read the standard requirements.

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or

(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

(1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

STEP 3, Cont'd.

Recordkeeping and Reporting Requirements, Cont'd.

(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating

STEP 3, Cont'd.

Effect on Other Authorities, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a source can hold; *provided,* that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4
Read the certification statement, sign, and date.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Kathy French Name	
Kathy French Signature	Date May 4, 2009